



GROUNDWORK

An aerial photograph showing a large-scale industrial or agricultural operation. Several large yellow bulldozers are visible, moving earth in a field. In the foreground, a large yellow bulldozer is partially visible, with its blade lowered. The field is divided into sections of green crops, likely a vineyard. In the background, there are more bulldozers and a small building with a tractor parked nearby. The sky is hazy, and smoke or dust is visible in the air.

**Port hole
swallows
farmers**

groundWork is a non-profit environmental justice service and developmental organization working primarily in South Africa, but increasingly in Southern Africa.

groundWork seeks to improve the quality of life of vulnerable people in Southern Africa through assisting civil society to have a greater impact on environmental governance. groundWork places particular emphasis on assisting vulnerable and previously disadvantaged people who are most affected by environmental injustices.

groundWork's current campaign areas are: Climate Justice and Energy, Air Quality, Waste and Environmental Health.

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In this issue

- 3 From the smoke stack
- 5 Profit farming trumps food farming
- 6 The dark side of Rio
- 10 Community workshops
- 13 World Bank: verdict is guilty...
- 15 Toxic effluent spills into local river
- 17 The NWMS hearings
- 20 Environmental Health roundup
- 22 Eskom saves the smelters
- 23 Africa breathes life into mercury treaty
- 24 The scourge of industrial pollution
- 25 My land, my life: land grab in Durban
- 28 Deforestation: why you need to stop it now



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groundWork is affiliated to the following international organizations:

Health Care Without Harm

International POPs Elimination Network

Basel Action Network

Oilwatch International

Global Anti-Incineration Alliance

groundWork is the South African member of Friends of the Earth International

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At the old airport in Durban there is land that has been farmed for the past twenty-five years by local subsistence farmers. With the proposed R1.8 billion dug-out port, the livelihood of these farmers is being threatened. Cover design by Barry Downard.



From the smoke stack



Photo by FoE

by groundWork Director, Bobby Peek

In the early hours of the morning, I sit and reflect on a busy past three months for myself and groundWork. We have just celebrated our thirteenth year of existence, and I can honestly say that neither Gill, Linda nor myself thought this far ahead in the June of 1999. But the intensity of the last three months confirms for me that we are in the right place, doing the right thing, despite the difficulties of closing democratic spaces – nationally and globally – shrinking funding and an even more aggressive elite development paradigm, which is witnessed by the further entrenchment of the minerals and energy complex development mode in South Africa, designed to keep people poor so that there is always surplus labour: labour to extract coal cheaply, coal which is to be burnt to create the world's cheapest energy for multi-nationals, which extract Africa's minerals cheaply (again) to be sold off at a huge profit. This is a model of development most of the global Southern elite have come to adopt, in the name of poverty alleviation, a model of development that not only kills people at the workplace, where conditions are often inhuman, but also has a brutal power to it. Those who resist it have often to fear for their lives.

This confronted me in the early hours of the morning as I hooked up to the outside world, still sandy-eyed, when, glaring at my e-mails on my cell phone, I had to read of the deaths of Almir Nogueira de Amorim and João Luiz Telles Penetra, artisanal fishermen and members of Homens e Mulheres do Mar Association (AHOMAR) in the Guanabara Bay, just outside Rio. They went missing on the 22nd of June, after going out fishing. As reported by Friends of the Earth International (FoEI), Almir's body was found on Sunday, the 24th of June, tied to their boat, which was submerged close to the São Lourenço beach in Magé, Rio de Janeiro. The body of João Luiz Telles Penetra was found on Monday, the 25th of June, close to the São Gonçalo beach, with his hands and feet tied in fetal position. Their

crime: resisting the Brazilian state oil company Petrobras' development that was impacting upon their right to fish and collect food for their families. This is not the Rio that the negotiators at UN Rio+20 gathering witnessed. Until the UN addresses these realities, Rio+40 and whatever else is to come will merely be entrenching the brutal power of political elites and corporate power. It is corporates such as Vale – which has extensive greenwash advertising in critical magazines such the National Geographic – and Petrobras who benefit. FoEI has been clear about this in the "Corporate Capture" approach to the Rio+20 negotiations. Sadly, challenging Vale coal mining operations in Mozambique touched a nerve within the Brazilian government, and journalist and member of Friends of the Earth Mozambique, Jeremias Vunjanhe, was turned back to Mozambique at the Sao Paulo airport without reason. FoEI had to challenge the Brazilian government to allow him entry and, on Monday the 18th of June, he was finally back in Brazil to present the case against Vale at the UN.

For my sins, during a long haul flight I was stuck next to a fairly inebriated Irishman who was busy on the second phase of the Lesotho Highland Water Project. I did not understand the enormity of this venture until he started talking about eleven metre diameter pipelines that will divert water from Lesotho to the Vaal catchment. And no doubt on to Medupi, if government so chooses. The minerals and energy complex needs water and Gauteng needs water since their own water resources are contaminated with acid mine drainage. Despite the uproar being made by society, and especially the Federation for a Sustainable Environment, we still have acid mine drainage, with its sulphurous hellish smell, being pumped out into the environment on the West Rand without been treated. Standing next to Marriette Liefferink on mine dumps, watching acid mine drainage gushing from the earth, you ask yourself, "why is government not doing anything?"



To compound matters you have shack settlements on and in the vicinity of mine dumps, which have high uranium levels in the dust that blows onto peoples' homes in the dry winter months and flows into people's neighbourhoods during the summer storms.

The World Bank finally released the Inspection Panel report and the Bank's management response. They agree that there are problems, but have decided not to take immediate action. I honestly did not expect that they would even agree that there were problems, so I am not surprised by their lack of eagerness to take action. But, interestingly, during this time as well, the Panel has decided not to investigate their loan for a Kosovo lignite-fired power station. They have been under some severe pressure and this is not surprising. What is surprising is the trajectory of struggle in Kosovo when compared to that of the people in Lephalale. Just after the Panel's decision not to investigate this loan, the real picture starts emerging.

The now infamous ex-US President Clinton is hailed as a hero in Kosovo for launching the NATO bombing campaign to drive the Yugoslavian troops out of the Serbian province. The irony in all of this is that one of Clinton's generals, Wesley Clarke – who according to The Voice of Russia is on friendly terms with “Hashim Thaci, who, in the 90s of the last century, headed the Albanian mafia group that was involved in the smuggling of arms, drugs and human organs in Eastern Europe” – is back. And back with a new campaign: making liquid fuel from coal! This is an operation that we know well in South Africa, through the likes of Sasol. It is not an operation welcomed in Sasolburg and Secunda, but soon to be coming to Lephalale. Ironically, as in Lephalale, the World Bank is in the vicinity of this debate. Is the funding of the coal-fired power station in Kosovo the wedge for further dirty development in Kosovo – as in the case of Medupi? You're damned right it is. It is not only what the World Bank funds, but what its funding facilitates and greases. It is the start always of a slippery slope, well lubricated and going down a dead-end, one-way street.

Part of my travels also took me to the Lephalale area in May. For a three-day period I spoke to more than 200 women who are part of the Women's

Agricultural Union North. They are housewives, mothers and daughters, primarily of farmers in the area. Being alerted to the fact that their area will be the next Sasolburg or Witbank was a shock to them. They did not have the understanding that what Medupi is is not only a power station, but a wedge to a whole new world for their part of the world. I sat and drank tea with Hardes Steenekamp, a farmer whose family has been on the land for five generations. He is fully aware of the history that makes him a privileged South African and, while democracy has come to South Africa, he has yet to deal with the real challenges of what democracy brings – and this could mean the gutting of the area he sees as heaven. He proudly recalls that he has only left the area five times in his life.

I went on an early morning drive with a game farmer along the “banks of the great grey-green, greasy Limpopo River, all set about with fever-trees” which got me thinking of my son – who is my best beloved – and whether, after Medupi and all that will come with it, the great Limpopo will ever be the same. Will he ever get to see its unspoilt wonder?

From a vantage point I saw for myself the making of another south Durban, with Medupi on the right and Mathimba on the left. It brought back memories of Shell and Engen for me. The challenge for the people of the area will be in finding out how wonderful democracy can be when privileged farmers work with the not so privileged to be able to develop a front that collectively sees a new future for the area that benefits all. The struggle around Medupi must mean a deepening of our democracy and a collective sharing of struggle and future wealth, a struggle determined by the locals rather than the Eskom headquarters at Megawatt Park or smelters' headquarters in Melbourne or Luxemburg.

Finally, the good news is that groundWork is growing, not only in age. Megan Lewis has joined groundWork full time as our Campaigner on our Media, Information and Publications programme after spending time with us as an intern. And another Gill, Gill Waterworth, will be supporting Gillian Addison as our full-time book keeper. Welcome guys – we look forward to your being with us for a long time. ✎



Profit farming trumps food farming

by Bobby Peek

Fresh, locally produced food is set to be something in the past for south Durban

The struggle for the soul, land and environment of south Durban has been ongoing since the early part of the last century. It was then decided by the Union of South Africa, under the guidance of “her Majesty the Queen’s” government, that south Durban would be an industrial housing estate. It is known as the first apartheid-planned city. Since then, people have lost their land and others have been forced onto the land to live next to polluting industries. While the idea of an industrial housing estate is not entirely problematic, living next to oil refineries that are operating lawlessly is a problem.

The struggles are well documented in the media archives and, over the last two decades, on what we now know as the world wide web. But none of these hits will give you a true sense of the enormity of the present struggle that the farmers of south Durban face.

Farming has always been an integral part of the geography of south Durban. The building of the old Mobil refinery (now Malaysian state owned by their state oil company, Petronas) in the 1950s resulted in small family farmers losing their land. Farming was, and to an extent still is, key to South Africans of Indian descent who have tilled the soil and provided Durban with affordable food since their ancestors started arriving in South Africa in the 1860s. Today we find a group of these farmers tilling the soil of the south Durban area, on the old airport land. They have been doing this since the late 1980s when they received the land after having been removed from their previous lands by various apartheid administrations.

Fast forward to 2012, eighteen years after the demise of apartheid, and the struggle for south Durban is hotting up, the key terrain of conflict being not only on the fenceline of Engen and next

to toxic dumps in the townships of south Durban, but also about the right to land of the farmers that feed south Durban.

In the elite-development, grand-expansion vision of a new South African politician, big is beautiful, despite the contradictory evidence of this that abounds. In south Durban, big means the development of a new port that will see the reshaping of the physical and social geography of south Durban, starting with the farmers on the airport land, being kicked off this land to make way for the new port. In today’s development, ‘NGO’ish’ jargon, it is called a landgrab. It will mean that the farmers will lose “their livelihoods and the vocation they know best. It would mean over a hundred workers out of a job,” according to the South Durban Community Environmental Alliance (SDCEA).

While the plight of the farmers is well known in the halls of power – ask Mac Maharaj, President Zuma’s spokesperson, who has known about this since the mid 1990s – there is very little empathy for the situation the farmers are about to face. Transnet, the parastatal that will develop the port and that is about to pay R1.8 billion for the site, and the Airports Company South Africa, which owns the land (both government bodies), have just simply ignored the fact that there are farmers on the land. Interestingly, they have also just ignored the fact that SDCEA has called for the land to be used for small, labour-intensive development to coincide with housing for the very many people who do not have houses in south Durban. They have also ignored the fact that people from Umlazi have articulated their need for housing on the old airport land.

They have just simply ignored those with an alternative to their elite vision! ✖



The dark side of Rio

by Siziwe Khanyile

My visit to Rio de Janeiro was just before and during the period of Rio+20 which was this year's version of the United Nations Conference on Sustainable Development where international environmental policies are defined.

I found Rio to be a beautiful, vibrant and friendly city with welcoming beaches and interesting culture, heritage and sights. However, on my third day in Rio, I was exposed to the "other" side that is kept away from tourist eyes, where poverty, inequality, oppression, murders, pollution, land and resource expropriation are rife. I discovered that the city has many similarities with our own South African cities.

Through the Rio+Toxic Tours Project, which was a collaboration of various civil society organizations including Oilwatch, I, together with a group of journalists, fellow activists and academics, had the opportunity to visit communities and sites that exist in stark contrast to the purported aims of Rio+20.

The very well-organized Rio+Toxic Tours enabled us to meet the affected communities of fisher folk, oil refinery fenceline communities, people forced off land to make way for oil pipelines, waste pickers and people contaminated by pesticides.

The meeting place for the briefing and start of the toxic tours was symbolically on a bridge between a multistory Petrobras building and BNDES headquarters in downtown Rio. BNDES, which is the Brazilian Development Bank, is a fully public bank (although captured by private interests) which primarily funds large projects in infrastructure oil, gas, steel, agri-business and large dams. It funds projects of companies such as Petrobras and Vale, as well as projects in other countries, such as hydro dams in Peru that will supply energy to Brazil. In 2010 it had a budget four times that of the World Bank.

We are informed that the Bank has no public information policy and disrespects the law of access to information which makes it difficult to

monitor the Bank. Although Brazil's environmental legislation is good, it is violated and the Bank is largely responsible. The Bank's own environmental policy is greenwash.

Petrobras, on the other hand, has operations in several countries in Latin America and beyond. Although it is the fifth largest energy company in the world, we are told that it has a poor record of consultation with the communities in places where they operate, this being the case in Brazil as well.

On the first toxic tour, Rio+Toxic took us on a visit to the Duque de Caxias community just an hour's drive outside Rio. It is a community that exists wall-to-wall with Petrobras' Duque de Caxias oil refinery, REDUC. We also visited the area of the Jardim Gramacho dumpsite which was the largest dumpsite in Latin America but was closed a month before Rio+20. In addition, we had the opportunity to visit The City of Boys which is an historic place of contamination in Duque de Caxias. The environmental protection area of St. Bento was our last stop.

In Duque de Caxias we were escorted by Sebastian Fernandez, a school teacher from the area who is also active in the environmental justice movement, organizing forums for affected people. They are organizing against the REDUC heavy crude oil refinery and nearby petrochemical industries. Duque de Caxias is the fourth largest supplier of fuel in the country, and has the fifteenth highest GDP in Brazil, mostly due to taxes from the fifty-year-old refinery.

This is not a true reflection of the picture we saw in Caxias. Infrastructure development happens outside the area. The people don't have sanitation or clean water; they live wall-to-wall with the refinery – making south Durban look so much more pleasant. The community regularly experiences explosions and other incidents. The area is heavily polluted, yet more industry is coming into the area, the refinery is expanding and a chemical hub is



being added. People who used to fish in the Bay are no longer able to because it is now polluted and not being treated. Agriculture was big but now industrialization has taken over.

The biggest refinery in Latin America, not very far from REDCUC, is being proposed and infrastructure is being built to connect the two refineries. Resistance to these developments is criminalised.

The next visit was to the Metropolitan dumpsite of Jardim Gramacho, which closed a few weeks before Rio+20, where we met with the ex-waste pickers who worked at the landfill. Before this landfill site closed, it received the biggest amount of waste in Rio, at 6500 tonnes of waste per day. It was also the biggest in Latin America. In the 1990s, the mountain of waste was as high as ninety metres. In addition to domestic waste, the landfill was also receiving industrial waste which made it hazardous for the waste pickers. The landfill was built on inconsistent terrain, had no lining and there were fears that it would topple into the Guanabara Bay.

After the closure of the landfill, The Association of Waste Pickers entered into an agreement with government to get people employed outside waste picking. The president of waste pickers, Candy

Roberta, showed us the centre where ex-waste pickers can do woodwork, recycling and other trades funded by the government. Waste pickers are, however, nostalgic about the great movement of waste pickers, the community and the buzz that existed when the landfill was still open.

At the end of the day, our last stop in Caxias was the Cidade dos Garotos or City of Boys. This community was host to an orphanage and a pesticides company owned by the government during Brazil's dictatorship. They produced DDT to fight malaria. When the capital changed from Rio to Brasilia, the insecticide factory was abandoned and, twenty years later, the products left behind are still active. There are 385 families living in this community whose tranquility and lush residence conceal the threat that lies beneath. The contaminants have resulted in cancers, paralysis and gene mutation in this small community .

The community wants a cleanup. They have demanded frequent health examinations and they wanted research on the impacts of the contamination to be conducted in partnership with one of the universities, but this was disallowed by the government. They have taken the issue to Congress. A minister has visited the area but



Alexandre
Anderson with
members of
AHOMAR.
Photo: Clemente
G. Bautista Jr.



nothing has been done. The community want to remain because they feel safe. They inform us that there is only one road into the community so the threat of criminal activity is small and all the families know each other. Unfortunately, none of them own the land. It is government land and the government wants them to leave.

This visit to The City of Boys was our last trip for the day and, as the dark had already settled, we made our way back to Rio. On the bus trip back, I reflected on the abuse of power by corporations and governments and was reminded of the industrialized south Durban, Vaal and Highveld where I work with communities, who are stuck in poverty, unemployment and poor health, bearing the burden of pollution in their lungs so South Africa can play with the big boys as a "leading emerging economy" yet seeing none of that wealth. On the second toxic tour we again gathered at "the bridge" and were briefed by Rio+Toxic organizers. This second trip would focus on the fishing community in Magé, a metropolitan region of Rio de Janeiro

where we would meet with a resilient group of fishermen and women fighting oil pipelines and various invasions on their fishing activities in the Guanabara Bay.

In Magé, we met members of the Association of Fisher Men and Women (AHOMAR) representing about 900 families in this community who are fighting various projects related to the construction of the Rio de Janeiro Petrochemical Complex (COMPERJ), by the Brazilian oil giant Petrobras.

Among the fishermen we met, Alexandre Anderson, who is president of AHOMAR, lives under 24-hour police guard. He moves around in a police car and lives with two policemen in his house. This is the price he and his family have to pay for protection under the Human Rights Defenders and Protection Programme. This intense security is a painful demonstration of the extent of the threats and dangers that ordinary hard-working people are faced with when they challenge large and powerful multi-national corporations, even the ones that are state owned.

*Mangroves still
damaged by
oilspill which
took place in
2000 in Mage.*

*Photo: Clemente
G. Bautista Jr.*



The fishermen we met expressed much dissatisfaction with a variety of issues.

As a result of various projects and construction in the Guanabara Bay and in the community for the Petrobras projects, the area where the community have historically taken their subsistence is now occupied by piers, platforms, ships and oil and gas pipelines, resulting in an eighty percent reduction in the volume of fishing in Magé. In 2009, the men and women of AHOMAR occupied the construction sites of land and sub-sea gas pipelines which were making fishing impossible in the Guanabara Bay. They resisted by anchoring their boats close to the pipelines and remaining there for thirty-eight days. Since then, the fishermen have been under constant threat.

The fishermen informed us that they utilize simple fishing nets and that these are deliberately cut by the big ships, which also threaten their small boats by coming too close and causing them to capsize. They are prevented on all fronts from carrying out their fishing and some parts of the shore are fenced off to block their access. They have received no compensation for the intrusion but are being expelled from doing fishing through physical and psychological pressure, threats and assassinations by the state and Petrobras. The company's private security shoots at fishermen and there is no investigation into such incidents.

Claudia, who is the wife of a fisherman, expressed that the women were previously able to stay home and care for the household while the men fished, but that now they have to go out and find other jobs and work outside the home, which results in a loss of the notion of family.

In the same community we also witnessed the effects of a 1.3 million litre oil spill into the Guanabara Bay that took place in 2000. The spill was from a burst underwater oil pipeline connected to REDUC. Mangrove plants and animal species, as well as the health and livelihoods of people, have been affected.

This oil spill was what prompted the creation of AHOMAR.

AHOMAR's resistance has resulted in the death of some of their founding members. We were informed that two previous presidents of the association were killed in front of their families but nothing has been done about these deaths. This is the reason for the 24-hour police escort afforded to Alexandre and his family.

Just a few days after leaving Rio de Janeiro, members of Oilwatch received an email from colleagues in South America saying that "two other fishermen who are members of AHOMAR were killed. One was found with the hands and feet tied and with marks of execution." This is a demonstration of the continued threats, violence and killings that are escalating against this community. They are facing a tough reality of being denied a right to work and the destruction of their traditional way of life.

Subsequent to the visit, we have signed onto a petition denouncing the murders of AHOMAR fishermen. The meeting was an emotional one as several people on tour broke down in empathy with the families.

"Petrobras has more rights than people," were the sentiments of a woman from Surui who had to abandon her home due to the construction of a gas pipeline by Petrobras. There are signs in Portuguese saying "Watch Out – there is a pipeline underneath" with white and yellow markers indicating the route of the pipeline passing next to people's houses and where other houses have been cleared to make way for it. Already, just from the construction of the pipeline, a water well had been contaminated, resulting in people who drink the water presenting with illnesses such as stomach aches and vomiting. The walls of their houses are cracked due to the heavy machinery brought in to construct the pipeline.

The area is declared a "protected area" – to protect the pipeline, not the people!

The fishermen tell us that they resist, not because they want to, but because if they do not, they will die. This was really a call not only to support and be in solidarity with their struggle, but to learn from their fight and to continue to relentlessly champion for justice. ✖



Community workshops

by Siziwe Khanyile

groundWork helped communities prepare for winter pollution

groundWork's primary objective is to see that "people are living well with each other and with the earth". To this end, groundWork works closely with and supports community and civil society in engaging with and challenging various processes linked to air quality, environmental health, energy sovereignty and oil, gas and coal mining, in order that we can give this objective meaning.

While supporting communities in defending their environments and protecting their health and livelihoods, we also help create consciousness for the seeking of alternative energy forms and work towards the realisation of an energy model that is not based on destructive energy sources and respects sovereignty, justice, dignity and human rights.

Just before the start of winter, groundWork embarked on a round trip of community workshops in South Africa's pollution hotspots of the Highveld, Lephalale and the Vaal triangle.

The aim of these gatherings was to hold workshops and training on issues related to environmental justice, air and water quality and mining pollution.

Community organizations were trained on the monitoring of ambient and indoor air to prepare the Community Air Quality Monitoring Teams for winter monitoring. Communities received training on the use of the Mini-Vol for dust sampling and on the use of B-Tex samplers, as well as training on the reading and interpretation of government air monitoring data. A detailed monitoring programme for the winter months was developed with the community organizations. This monitoring seeks to demonstrate the state of air pollution in households during the winter period and to generate information that communities can use as a tool to advocate for better services in their communities, including an increase in free basic electricity, better housing, and so on, and to engage government

to do more than just the *Basa njengoMagogo* as a household energy strategy.

The workshops also reviewed the participation of communities in the various government Air Quality Priority Area processes, looking at the challenges and successes. Strategies on how communities can engage in these processes going forward were discussed.

Energy sovereignty discussions and research was conducted in the communities. groundWork is trying, through engaging with community people, to understand what their experiences with energy are and what they understand about the concept of energy, so that we can inform our research process on energy sovereignty.

Media strategizing also took place as a vital aspect of campaigning. groundWork's secondary objective is that: "The environmental justice movement is visible and effective and integrated within the broader justice movement." To this end, we have to get peoples' struggles into all forms of media to ensure that the environmental justice message is spread.

Lephalale: The future environmental sacrifice zone

The workshop in Lephalale, Limpopo Province, was attended by over eighty people at the Mogol Club in Onverwacht. groundWork, with community members, discussed and built understanding of the environmental and social impacts of Medupi on the community. The workshop also took time to discuss the response of the World Bank Inspection Panel and to strategize on how the community can monitor and continue to challenge the coal-fired power plant and its associated developments. Over the past two years, groundWork has engaged with communities in this area to monitor and challenge the World Bank's loan to Eskom for the development of Medupi, where we challenged the



World Bank and called for the intervention of the World Bank Inspection Panel (IP).

Even though the community is situated next to coal-fired power stations, they do not have access to electricity and have to suffer from the environmental and health impacts. The electricity generated by these plants is not for the people but rather for industry, which receives it cheaply.

Before the loan was given by the World Bank to Eskom, various issues were highlighted, including concerns about water availability, health impacts, cultural and heritage issues, impacts from increased mining, impacts of sand mining, climate change and a host of other concerns.

The Inspection Panel, after their review of the World Bank loan to Eskom and issues on the ground, reported that the World Bank had overlooked various issues. These included the scarcity of water, that air quality and climate change challenges were not adequately assessed and the issues of influx of labour, poverty and other local social impacts.

Those community members who came to the workshop, from Marapong, Shongoane, Onverwacht, Bangalong, Sefithogo, Seleka, Abbotspoort, Ditlounge and Steenbokpan, highlighted the environmental and social justice challenges that they face in their respective communities. These included extended electricity cut-offs in Marapong, where people live a stone's throw from coal-fired power plants, lack of skills and employment (despite Eskom promoting Medupi with the promise of jobs), increased traffic, waste, opening of new mines and water issues, among many others.

These problems are also exacerbated as a result of the town's infrastructure not being able to support developments such as Medupi and other industry developments. For the first time there are traffic jams in Lephalale. Discussions were held on environmental justice issues – water and mining impacts – evident in the Lephalale area.

Additionally, the Waterberg area, where Lephalale is located, has been declared South Africa's third air quality priority area and present air quality will deteriorate, as a result of pollution from mining,

Medupi and, possibly, Sasol's coal-to-liquid facility, thus impacting upon health.

The Highveld: Where breaking the law is not illegal

The workshop in Middleburg was attended by representatives from over fifteen communities in the Highveld, with a strong youth representation. The gathering took place at the start of winter when the Highveld experiences its worst pollution conditions. In the winter months, it is not uncommon for South Africa's democratically developed ambient air pollution standards to be exceeded daily. The Highveld has been declared an Air Quality Priority Area by the Minister of Environmental Affairs because it is an area where ambient air quality standards are being exceeded and where conditions in the area are causing a negative impact on the environment and on the health of people living there.

Communities gathered to hold discussions on mining issues and the sentiments were that people are concerned about the increase in mining activity in their communities. Although mines provide some employment, people earn too little to care for their families and people are faced with problems of cracked houses, dust and undrinkable water. People have been uprooted from their agricultural way of life to depend on mining, which is unsustainable. They also raised concerns about the lack of rehabilitation after mining operations have ceased.

A conversation was had on energy and concerns were raised about the use of coal for household energy. The issue of increases in electricity prices was a thorny one, and the sentiment was that Eskom's planned electricity pricing increases impact heavily on the communities because, after Eskom makes their increase, the municipalities also add their own increase. Therefore, Kusile power plant is not being built to alleviate poverty. Instead, the rich and industry benefit while the poor are left with the pollution to air, water and lungs.

groundWork held training on the use of the MiniVol to test indoor air pollution in people's homes. The Department of Environment has over the years vigorously promoted the *Basa njengoMagogo* method of burning coal in the home. Tests will be conducted in several households over the winter period in the Highveld.



The Vaal: The failing “priority area”.

We held the Vaal workshop in Vanderbijlpark over a two-day period. The first day was an internal meeting, held with members of the Air Quality team from Vaal Environmental Justice Alliance (VEJA) and groundWork.

The Team, together with groundWork, reviewed the existing air quality challenges in the Vaal, noting the failure of the implementation of the air quality management plan which includes capacity issues from the municipality and lack of collaboration between local and district authorities (ambient air quality is the responsibility of the local authority). This was developed under Section 18 of the National Environmental Management: Air Quality Act that designated this area a priority area. There is a proposal for a silicone smelter, which is a silicon metal producing facility planned for Sasolburg, where air quality is already compromised. The issue of delays in the Atmospheric Emissions licensing process were highlighted. The problems of monitoring stations that are not working (laptops are getting stolen and there are maintenance problems), resulting in inadequate monitoring data, was another of the challenges identified.

Together, VEJA and groundWork developed their action plan with regards to air quality in the Vaal,

which groundWork will support. VEJA also received a thorough training on how to interpret government monitoring data and how that information can be utilized. They received media training and a monitoring programme for winter was developed with the team.

On the second day, the Vaal community workshop took place on the 22nd of April in Sebokeng, Gauteng. The meeting was dominated by very active and engaging ex-workers of ArcelorMittal. These workers are seeking compensation from ArcelorMittal. Some of the workers were unfairly dismissed or retrenched, without due compensation. They have established a group called Vaal Workers Coordinating Committee to take on this fight. The retrenched workers realized that their fight was not only about their retrenchment packages, but the reason behind the retrenchments was that many were too sick to work as a result of impacts from Arcelor Mittal operations. Conversations were had with this group on environmental justice, with some of them sharing their own experiences of this from the communities they originally came from in the Eastern Cape, KwaZulu-Natal and Lesotho. Issues of air pollution and health were unpacked within the context of the air quality priority area process. Strategies and plans for engaging, monitoring and challenging the status quo were developed.

In all the communities visited, energy sovereignty research was conducted with households with different types of energy use set-ups. This included those utilizing prepaid meters, mbawulas (braziers), coal stoves, solar energy for water/lighting and various other scenarios.

The workshops and training are an important way of exchanging information and supporting the impacted communities that we work with to enable them to influence and demand environmental justice.

We look forward to our national exchange, where community representatives of all these three areas meet to share struggles and campaigning tools in order to develop a broad national struggle. ✎

Participants at the Highveld workshop decry what is happening in their area.

Photo: groundWork



World Bank: verdict is guilty...

by Bobby Peek

...but so what?

In response to the Inspection Panel's 2010 investigation, called for by local residents and supported by Earthlife Africa (Jhb) and groundWork, Friends of the Earth South Africa, the World Bank Board has agreed that the development of the Medupi Power Station entails substantial environmental and social risks that have to be considered. This is a vindication of local people's concerns about the on-going challenges posed by the development of Eskom's coal-fired power station.

It was accepted by the Board that the South African governance systems – supposedly acting as a safeguard to protect peoples' environment and health – did not fully meet and comply with the Bank's policy. This is specifically related to non-compliance and inconsistency in the following areas:

"(a) assessment of equivalence and acceptability, in particular on issues relating to assessment of cumulative impacts, independent expert oversight and capacity constraints; (b) impacts on air quality and health; (c) impacts on water resources; (d) impacts on public infrastructure and services, and (e) inadequate consideration and economic analysis of alternatives and risks, particularly with regard to water and air externalities." This conclusion could only have been reached because wrongdoing was found.

Water: None available so none needed – a flawed logic

The Bank and Eskom have their backs up against the wall on the water issue. It is well known that the availability of water is a challenge in this part of South Africa. The original plan for Medupi did not have water-intensive sulphur scrubbers as part of their plan, and the Department of Environmental Affairs' record of decision said this was not needed because the area was not polluted. Indeed a flawed

logic. Scrubbers are pollution capturing devices that are needed – and are now common practice with coal boilers in the global North – to remove the sulphur from the emission stacks for the coal boilers. This is so that one does not get exposed to the excessive amount of sulphur that is so evident when you drive through the Highveld and Gauteng area, and that impacts severely on people with respiratory problems. But the other issue that is critical to consider is that the sulphur scrubbers need huge amounts of water, in addition to what Medupi will need for its normal operations. And this water is not present.

Beyond Medupi, one has to consider the coal mines feeding Medupi and their impact upon water. There is substantial evidence from the Mpumalanga Province that coal mining has had a detrimental effect on people's access to water. In a recent report by Greenpeace Africa, the fact that the "hidden water footprints of the mines supplying the coal are often forgotten" is highlighted. Sadly, despite this reality, the Bank recognizes that there are no provisions in South African law – or its own policies – that would require Eskom to manage the impacts created by its suppliers. Thus, buying coal and sand from companies who impact negatively on South Africa's water resources is not an issue for Eskom or the Bank.

Knowing that the availability of water is a challenge – even with new water schemes planned to bring in water for Medupi – the Bank and Eskom had to find an innovative approach. They've come to the conclusion that the additional water from phase two of the water scheme will not be needed. The Bank Information Centre, a Washington, DC-based NGO monitoring the Bank, questioned how it could come to the conclusion that the phase one water process "will be sufficient to meet the needs of the project" as this "contradicts the Bank's



original assessment of water needs and the Panel's findings".

The politics of decision making in the World Bank

The Bank and its decision-making processes are by no means simple. There are significant complexities based upon power dynamics and relationships between the Bank's Board of Directors and senior management, and between states at the table. The Bank's Energy Strategy is a case in point. It was being discussed during the uproar over Medupi. The strategy suggests that the Bank should not lend money for coal projects to middle-income countries such as South Africa, Brazil and India. According to the Bretton Woods Project, the question of funding coal in middle-income countries such as India, China and South Africa, has stalled the Energy Strategy process, with these countries arguing that "it is unacceptable for the Bank Group to discriminate between categories of countries in terms of fuel base". It has been these same countries whose directors at the Bank were very much against the Panel's investigation and report. They felt it was challenging their sovereign decision making processes.

These complexities in decision making played themselves out during the process of the Panel's investigation. In March, the original response by the Bank management was completed. This was held back for some time and then, in May, a supplementary note was developed which "washed" away the concerns the South African public had about water, and indicated that the second phase of the water scheme will not be needed. In the corridors of "power" there has been gossip about the usefulness of the Panel for some time now. Some believe that the delay in the release of the Medupi investigation had to do with this tension in the Bank. The response from the Bank on the Panel's finding was to deny any wrong-doing, despite the evidence being present, and limiting action only to monitoring the future developments at Medupi. Is the Panel losing whatever small power it had to call the Bank to account? Ask the Kosovans, who have also been asking for an investigation into the Bank's funding of a lignite-fired power facility – and who have just been told that the Panel will not investigate.

So where to from here?

Did we honestly expect that the Panel's investigation would actually force the Bank to account? No. We have always been brutally honest with the people: the Medupi deal is signed, sealed and dusted. What the Panel's investigation did was to open up an opportunity and space for people to contest the local development model for the area. What is critical to understand is that the Bank's loan to Eskom for the Lephalale-situated Medupi plant is merely a wedge to the greater elite-driven development plan for the area which falls under the broader South African minerals and energy complex development model. Today it is Medupi and its associated mine Grootgeluk (sadly translated to mean "great luck"). Tomorrow it is Resource Generation, an Australian outfit that has already got rights to mine coal in the area and ship it out, and then there is Sasol's next coal-to-liquid venture, Mafuta, and then plans to gassify coal underground, and then the next inevitable step is smelters. There is clearly an abundance of electricity now that Medupi is coming on line and it needs to be "given away" and what better recipient than smelters?

So, the struggle going forward is to ensure that the greater Waterberg area – which government has accepted in its own rationale to be the next sacrifice zone, the next Witbank, Sasolburg, south Durban – does not actually become that. There is hope and energy to resist so that the collective future of people is not lost in the haze of pollution.

Finally, this process has forced the Bank to recognize that the local people have a direct say in the process around Medupi. In June this year, for the first time, the Bank informed groundWork that they will be in the area and would like to meet with us. We were, however, given only three days notice – for a meeting which was planned months in advance! But, it is a start. However, I am not holding my breath. A local resident's honest response to this game by the Bank was: "We want to be part of this process because we believe it is vital to protect our environment, our way of life and our future. We do not, however, want to be just a tick in a box to prove that yet another international agency had done some 'public participation'." ✕



Toxic effluent spills into local river

by Musa Chamane and Megan Lewis

The Baynespruit River in Pietermaritzburg has been found to be dangerously contaminated with benzene and other toxic industrial chemicals

While the sewer pipeline near Eastwood has been repaired by the Msunduzi municipality, results from samples taken of the Baynespruit River show high levels of benzene.

Environmental protection is still not a priority for our government. The Baynespruit River near the suburb of Eastwood and Sobantu Township in Pietermaritzburg have been receiving a constant supply of a cocktail of contaminants for many years. Recently, a sewer pipeline has been leaking directly into the stream, contaminating water and soil. The subsistence farmers downstream have ceased using the water for their vegetables for fear of chemicals transmission from vegetables to human.

After receiving an e-mail from a distressed member of the Pietermaritzburg public, indicating that the pipeline had been leaking for the past year, we visited the site to investigate what the white, oily liquid that was pouring out of the pipeline into the Baynespruit River might be. Upon arrival, the smell was pungent to the extent that our eyes and noses were burning and we both felt nauseous. The pipe was noticeably old and rusted, and the hole from which the effluent was gushing out was fairly large. We could see the viscous liquid being carried far down the river, which leads down to the Umgeni River in Durban.

Much debate went on about what the white milky substance that we had taken samples of and brought back to the office was. It was concluded that it was likely resin, which is a type of glue. Dystar-Bohme is a glue-manufacturer and is located up the road from the pipeline, and so the theory made sense. Nevertheless, the pipeline is owned by the Msunduzi municipality and thus it was up to

them to maintain it to ensure that such incidents were contained. While the pipe is a municipal sewer line, certain industries in the surrounding area are permitted to use it to get rid of a certain portion of effluent that they produce so that these toxic effluents can be treated at by Umgeni Water's liquid waste treatment facility.

A municipal official had explained that it was difficult to fix the hole in the pipe as effluent was continually passing through it. They admitted that the effluent was from Dystar-Bohme. groundWork's view was that it was up to the municipality to make alternate arrangements, such as to truck the industries' effluent to Darvill waste water treatment plant located in Scottsville, whilst they were repairing the pipeline. People we met in the area had said that the situation had been ongoing for many months – the municipality had seemingly done little to rectify it.

Upon speaking to the municipality, this was substantiated and so groundWork went with the story to a local newspaper, The Witness, in order to place increased pressure on municipal officials. We were concerned for the health of the environment and neighbouring communities (and even those living further downstream) who were using the river for washing clothes and drinking. The Witness spoke to an official at the Umgeni Water's water quality department, which had conducted tests on the water, and they had found the river to be highly contaminated.

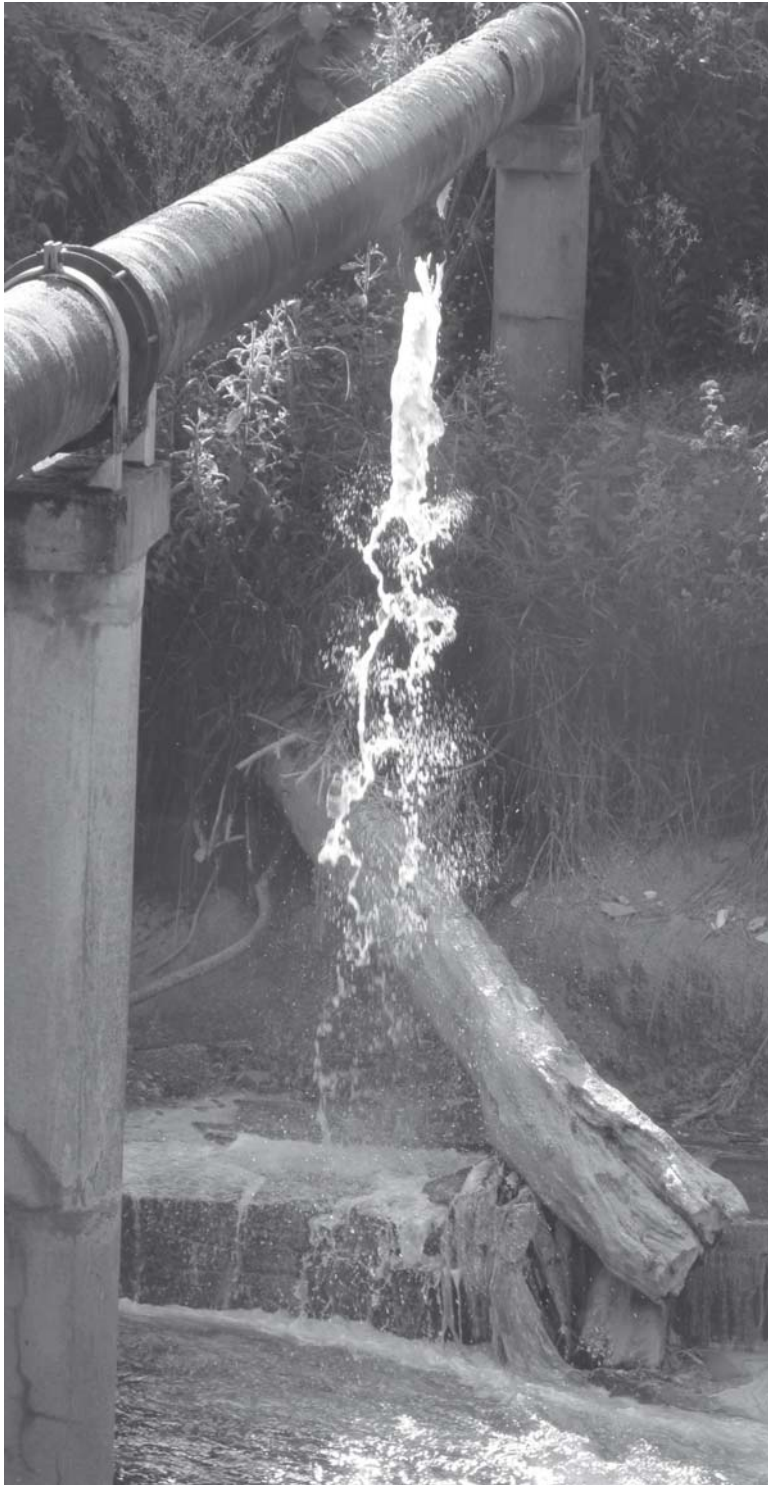
This was confirmed by the results which came back from our samples. A sample of the industrial effluent was sent by groundWork to the Talbot and Talbot Laboratory in Pietermaritzburg. The



Waste

Industrial effluent high in benzene pours into the Baynespruit River

Photo: groundWork



results showed dangerously high levels of benzene. Benzene is used in various industrial activities, such as the production of resin. The health impacts of benzene are numerous, ranging from drowsiness, and even unconsciousness, from inhalation, to anaemia. Even more concerning, a study by the International Agency for Research on Cancer (IARC) and the Environmental Protection Agency (EPA) shows that long-term exposure to benzene is carcinogenic to humans. In particular, it is known to cause acute myelogenous leukaemia (AML), a cancer of the blood-forming organs. The samples also show a certain level of oil. This raises a concern because any oil leak can result in millions of litres of water being contaminated.

How does this affect the man on the street? South Africa is a water-scarce country and, as a result, we import a high percentage of water from our neighbouring country, Lesotho. Otherwise, we rely on our supposedly fresh water resource coming from our rivers and dams. If most of our rivers are contaminated that means a lot of money has to be spent on water purification to bring it to the level where it can be used or consumed by humans. If there is a very high concentration of some chemicals in our rivers, that means those rivers cannot assist us in providing water for human consumption. Therefore, if we fail to manage or control such incidents, that means more and more of our tax money will be used to cleanse the water.

Thanks to all the whistle blowers regarding this pipeline leak, especially to Mark Bastew from Legal Aid, in Pietermaritzburg, who first alerted us to the problem. ✕



The NWMS hearings

by Musa Chamane

The National Environment Portfolio Committee proves its metal at the National Waste Management Strategy hearings, held during May 2012

The Department of Environmental Affairs (DEA) has been hastily pushing the National Environment Portfolio Committee (the Committee) to approve the National Waste Management Strategy. The strategy is developed as a guide for the implementation of the Waste Act 2008. The Committee chair, Advocate De Lange, took everyone by surprise when he called for parliamentary hearings regarding the strategy after it had been in the national gazette – the Committee had decided that it has to come through them again. There were three sectors that have been invited to come and make presentations on the strategy. Only those who had forwarded written submissions could make inputs. This disadvantaged community people who had not made written inputs to the Committee. We need to consider how to ensure that this is not a limiting factor for effective participation in the future. Government departments, industry and NGO made inputs to the strategy.

Department of Environmental Affairs comments

The DEA mentioned that they started developing the strategy in 2010. They invited various stakeholders to be a part of the development of this strategy. There were challenges that were encountered along the way. Waste definition has been one of the problems. Each participant had a definition that best suits their activities. For example, the cement industry does not regard bottom ash as waste but as a by-product, while the department classifies ash as waste. Therefore, the department decided to develop its own working definition which is the one used in the strategy. Consultation meetings were done through provincial meetings held in every province and three stakeholders meetings. The strategy excludes other waste streams such as mining waste. The mining waste is covered by

minerals legislation, the Mineral and Petroleum Resources Development Act (MPRDA).

The role of municipalities in terms of separation of waste at source was also covered by DEA. They have consulted with the South African Local Government Association (SALGA) regarding the issue of source separation. SALGA assured DEA that separation of waste at source will be feasible. Areas that are not receiving waste removal are going to be receiving the service in the future and this is still on the table between DEA and SALGA. The municipal billing system is generally wrong, but there is no model for how all municipal categories should bill the service recipients. The DEA still wants to engage more with municipalities on this issue; treasury will also be on board. Diversion of waste from landfill by twenty-five percent in the next five years is one of the goals of the department. There are 69 000 jobs to be created in the sector since the sector is worth billions of Rand.

Reaction by the Portfolio Committee members

The Portfolio Committee felt that, although the strategy has been developed, it has many grey areas. They feel that the document cannot be implemented at a municipal level. The DEA has therefore been ordered to develop a simple document to supplement the strategy. The document that the Portfolio Committee has been ordered to develop should cover many aspects such as the role of municipalities and it has to answer all the questions – who, what, how, when. The DEA has been asked to come back and report in three months' time. The issue of waste incineration was also raised. It seemed as if the DEA are prescribing the technology to be used, but the DEA denied having preferences about which technology



should be used. It stressed, however, that the waste hierarchy has to be followed when dealing with waste. The waste hierarchy must be followed in all circumstances and only if the other options for dealing with waste have been exhausted can treatment or incineration be undertaken.

The health department inputs

The Department of Health (DOH) is actually satisfied with the strategy and they were consulted by the DEA during the development of the strategy. They made it clear that the regulations for dealing with health care risks waste (HCRW) were passed last month. The main concern they have is with service providers who deal with their waste stream, especially the HCRW. Entrepreneurs apply to the department for collection and disposal of this waste stream, even though the entrepreneur is not capable of performing such duties. The decision for tenders does not rest with each individual hospital but rests with DOH in each province. As a result of poor procurement procedures, incapable service providers end up dumping waste in the veld or in rivers. The department of health is really concerned about HCWR disposal tenderers.

Committee's response

The Committee responded by saying HCRW is a very important issue to be left in the hands of the province. The Committee has ordered DEA and DOH to work together and develop guidelines or standards for prospective tenderers. The issue of health care waste incinerators in South Africa is problematic because they cannot meet their license conditions. The monitoring of the general practitioners in rural towns is also problematic. Some of these practitioners are not complying with the law when it comes to disposal.

Human Settlement and Water Departments inputs

The Department of Human Settlement is concerned about sanitation being excluded from waste legislation. They believe that sanitation should be part of the Waste Act 2008 as well as the strategy. Sanitation has been moved from other departments to Human Settlements and there is not enough capacity within this department to deal with this. Human settlements are of the opinion that all environmental legislation should encompass

sanitation. The DEA are issuing the licenses for waste water treatment plants but "sanitation cannot be included in the strategy because it is not part of the Act" says Chief Director, Ms Nolwazi Cabinnah, of the DEA.

The Department of Water Affairs (DWA) raised some concerns on authorization, and compliance for landfills. Many landfills do not have effluent collection, which means that effluent ends up polluting the nearby streams and underground water. The DWA supports the waste management strategy. The DWA has developed the guidelines for unauthorized landfills. The DEA gets an application for the new landfill license and they then liaise with DWA, which should send inputs with conditions.

Cement Industries' input

The cement industry has been involved in the development of both the Act and the strategy. It, however, believes in sustainable development, twining it with clean production. If the coal could be substituted with tyres as a fuel source for industry, that would be a success for mitigation of climate change. There would be less mining of coal. They mentioned that they have committed themselves in the Polokwane declaration, as well as the 1999 NWMS. They are also of the opinion that the strategy should cover the extended producer responsibility, green economy, climate change and sustainable development and define all these in greater detail. In addition, they request that the distinction between a by-product and waste be made clear. They believe that a by-product is something that can be re-used in another industrial process and that it therefore should not be called waste. What they did not tell the Committee is that, if they burn tyres, they will be using public funds to retrofit their plants and to make a five-fold saving in their cost... at the expense of society.

CSIR inputs

The Council of Scientific and Industrial Research (CSIR) inputs focused on what the strategy omitted, such as regionalization of the landfills. The strategy does not talk in detail about how regionalization works, even though it does make mention of it in one of the strategy sections. The other issue is the waste pickers or informal waste recyclers. The challenge was to get all the information about waste recyclers.



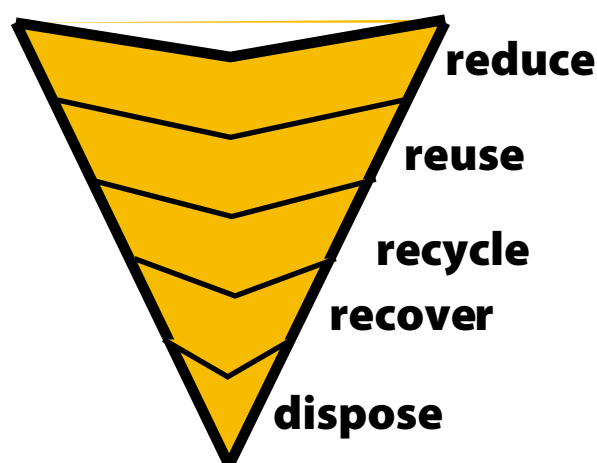
Thermal treatment of waste has not been covered to a satisfactory level. Measuring and monitoring targets are also a concern. Lack of information is of concern, especially regarding the informal economy sector from which it is tough to get information

The Committee ordered the DEA to work with CSIR as well with all the departments that have presented during these hearings. CSIR felt that the strategy has targets for five years, but it fails to set targets for a term longer than five years. CSIR has been asked to be part of all the working committees of the DEA.

Centre for Environment Rights and groundWork

The Centre for Environmental Rights (CER) spoke about the failure in monitoring and compliance, especially for the fence-line communities. No matter what legislation might be in place, if it is not enforced and monitored the Act will be useless. The south Durban community and Vaal communities are suffering as a result of poor monitoring. groundWork raised issues around information and said that waste pickers should be included in the waste management system, thus creating many jobs for the poor. The issue of the waste tyre levy is a concern for us because it could be accessed by the industry. The cement industry is likely to muscle out the organized waste pickers so therefore waste tyres should be shredded to recover rubber for re-use – that will create a lot more jobs. Waste recycling is the way to go in South Africa.

The Waste Hierarchy



Committee response to CER and groundWork

The Committee stressed that the legislation monitoring and enforcement should be a priority. The department will have to take all our inputs and update the strategy based on our inputs. The guiding document will have a lot of questions to answer. The Committee wanted to understand more about tyres and the green levy. They felt that they are not fully aware of the South African Tyre Recycling Process (SATRP) proposal and groundWork was asked to send more information to the Committee secretary. The Committee chair thanked the community representatives and stressed that they should continue their good work.

Conclusion

The DEA has been given the task of working with many government departments, the CSIR and SALGA, as well as municipalities to make the strategy more practical for implementation purposes. The Portfolio Committee raised the concern of getting to know about issues through the media and the DEA was asked to prepare briefings and update the members continuously.

This was a very useful process, especially for the community people whom we brought along. The DEA will have to come back to parliament to report back on the progress made regarding all the new activities that the Committee has ordered them to undertake. X

Firstly: Don't buy more than you need - **REDUCE** your purchasing and packaging

Secondly: **REUSE** wherever possible - if you don't need it someone else might

Thirdly: If you can't reuse it, **RECYCLE** it or make compost

Fourthly: If it can't be recycled then **RECOVER** value from it - for example generate energy

Only then: if there really is no other option, let it go to landfill for **DISPOSAL**



Environmental Health roundup

by Rico Euripidou

groundWork's Environmental Health campaign is involved in a wide range of activities

Environmental Health Campaign Training Program 2012

Health workers rarely understand the cocktail of industrial pollution that patients might be affected by or the reality that much of their illness is potentially caused by their place of work and where they live. When undergoing an examination it is very seldom – if ever – that pertinent questions, such as where do you live, what factory or industry do you live next to that could be polluting your environment and your health, are asked of them. This was starkly illustrated in a recent community meeting held in south Durban where people are trying to understand why their air is regularly

polluted by toxic chemicals. People are asking that health workers start recognizing pollution in their diagnoses. groundWork has, therefore, for some time now endeavored to work with health practitioners to get them to understand chemical exposure in their patients as possibly arising from the work environment. We have to ask these questions from an environmental justice perspective.

We have had an incredibly busy start to 2012 in our efforts to train health care and environmental health workers in the concept of environmental justice relative to the health care community. The focus of this campaign began with mercury and health care waste and has subsequently broadened into environmental health. The various priority issues that we have covered include the public health impacts of climate change, the implications of the new health care risk waste regulations and Waste Act for health care workers and the global movement towards mercury-free health care.

Overall, 289 clinical health care and environmental health workers have been trained over five training days and over forty occupational health and safety nurses participated in a public health and climate change seminar. In hospitals and clinics, the focus campaign for the elimination of mercury works in all spheres of health care: from local clinics and hospitals, through to local, provincial and national governments, the African region and the international treaty process.

Similarly, air quality impacts on health and waste are also integral to environmental health while the implications of climate change cannot be overstated. The EH training campaign therefore works in tandem with the other campaigns to contribute to people's understanding of the broader environmental and health issues, linking health care workers to directly affected communities.

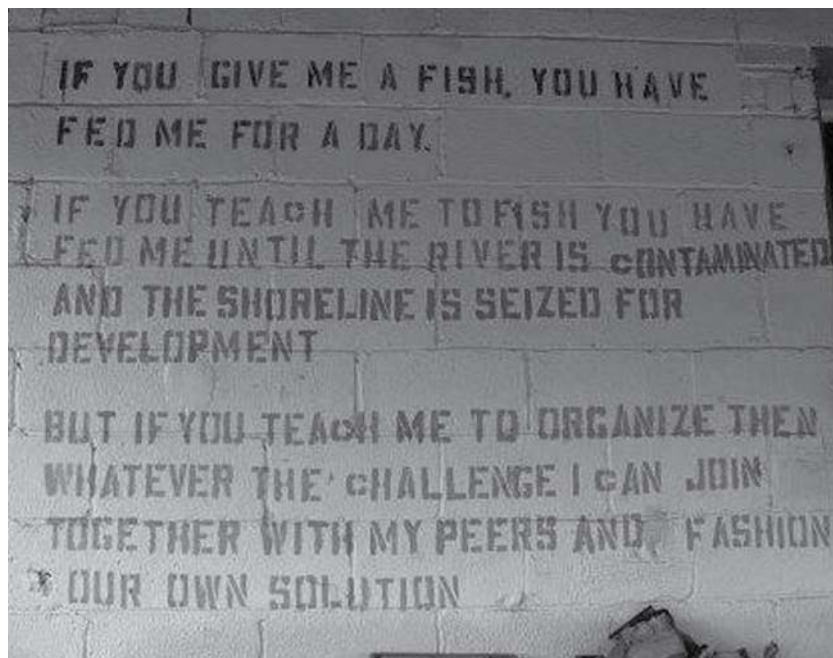
Rico Euripidou
shows
community
members the
inside of the
MiniVol
Photo:
groundWork



Global Fish and Community Mercury Monitoring Project: Local monitoring to support global mercury treaty negotiations

We become exposed to mercury (Hg) and methyl-mercury primarily through the consumption of fish. The Inanda Dam, directly downstream of the historical Thor Chemicals mercury contamination incident, where three workers died from exposure to mercury, has long been a source of livelihood for the mostly rural subsistence population who live in the valley within which the dam was constructed. groundWork, in partnership with the Biodiversity Research Institute (BRI) and International Persistent Organic Pollution Elimination Network (IPEN), are participating in a Global Fish and Community Mercury Monitoring. This is in an effort to highlight important data gaps, generate relevant mercury in fish and humans monitoring information and, more broadly, to support the negotiation of a comprehensive global mercury treaty, as well as efforts of impacted communities to reduce or eliminate negative effects of mercury pollution.

The primary goal of this project will be to generate new data on the mercury levels in fish in the Inanda Dam, raise awareness about global Hg pollution and identify specific hot spots, primarily from developing and transition countries of the Global South. The Hg monitoring information generated will come from sampling results from both fish and bio-monitoring (via hair sampling) of the communities who live on the dam's shores, in order to identify populations at risk of Hg exposure while also elevating public knowledge about the threats of global Hg pollution. While we have drinking water guidelines in South Africa for mercury, we don't yet have ambient air quality standards for mercury, apart from selected industrial activities such as medical waste incinerators, which do. In future, the forthcoming mercury treaty will ensure that much-needed mercury emission standards



for coal-fired power stations and metals smelters (such as ferromanganese, chrome and aluminum smelters) also have emission limits for mercury. The importance of this is that it's useless having, for example, drinking water guidelines if you don't control the emissions of mercury into the environment.

Many national and international health organizations recognize the risks associated with a diet high in fish and international guidelines for the maximum amount of Hg in fish have been established. However, adhering to and enforcing these guidelines is very difficult, particularly in South Africa where data on mercury in fish is rare or unknown.

The project will include four main tasks, including the identification of a hot spot, fish species and community to be examined. This will be followed by the collection of fish and hair samples and, working in partnership with a local laboratory, the development of sampling protocols and analytical methodology. Once we have the sample results we will write a hot spot report and publicize the results in the press. Globally, all the reports of the various participating organizations will be summarized in a global report which will be used to advocate for action globally. ✕



Eskom saves the smelters

by Greenfly

Readers will remember the Integrated Resource Plan (IRP 2010) for electricity for the period 2010 to 2030. Since the Department of Energy couldn't produce an IRP, it secretly called in the minerals-energy complex A-list to do it for them. The "technical" team included Anglo American, BHP Billiton, Sasol, Xstrata, the Chamber of Mines and, of course, Eskom.

They found that Eskom would need to more than double its capacity by 2030. Step back a moment, dear reader. In its first ninety years, Eskom developed something less than 40,000 MegaWatts of capacity but they must add more than 50,000 MW in the next twenty years. We know things are getting bigger faster, but that is a truly extraordinary acceleration. For what?

Apparently, the technical team found it was necessary to meet an extraordinary increase in demand mostly from ferrochrome smelters to be built by Anglo American, BHP Billiton, Xstrata et al. Supplying these smelters, they said, requires big base-load power plants which means more coal and a fleet of nukes.

Back in 2012 meanwhile, Eskom is again hard pressed to keep the lights on, despite the fact that demand has barely recovered to its 2007 pre-crash high and it has already added 4,000 to 5,000 MW capacity. It therefore approached the ever generous big energy users and offered to "buy back" the electricity they expected to consume. That is, Eskom would buy back what it had not yet sold and at a premium price.

The patriotic transnational ferrochrome producers immediately volunteered. Xstrata-Merafe shut seven smelter units, International Ferro Metals shut two, Hernic shut one. Samancor (Anglo and Billiton) and Ruukki shut more furnaces. In total nearly half South Africa's ferrochrome capacity was shut between February and June.

What Eskom paid for the electricity it did not sell is, of course, commercially sensitive information and therefore secret. But Xstrata-Merafe said it would

have "a net positive economic impact" for the firm: it would shut down for a profit.

We had barely swallowed that news when, a couple of weeks later, Xstrata-Merafe called for a trade tariff on chrome exports. China, they said, was importing South African chrome and smelting it cheaper than the local producers, so causing a massive shut down of South African plant. That is, of course, the same plant that shut down for Eskom's buy-back.

Step back another moment, dear reader. Eskom used to supply the ferrochrome smelters with the next to cheapest electricity in the world (the cheapest electricity, of course, went to Billiton's aluminium smelters). In fact, they supplied them at below the cost of electricity production – somewhere between 15 and 19 cents when it cost Eskom 24c to produce one kilowatt hour. Now, says Eskom boss Brian Dames, it costs 38c to produce a kilowatt hour. On my guesstimate (well, actual figures are commercially sensitive and therefore secret) they are still getting electricity below cost – probably around 33c/kWh.

Nevertheless, South Africa's energy subsidy is no longer competitive with China's energy subsidy. So the local smelters were making more ferrochrome than they could sell, driving down the price and so compounding their losses. Just as something had to break, Eskom's buy-back paid out handsomely for electricity they won't use in smelters they wanted closed. The price of ferrochrome then started to recover.

This really is brilliant. Transnational corporations (TNCs) can make a profit for their shareholders without going to the trouble of producing goods that are not wanted using power that is not there. The case for foreign direct investment could not be stronger.

Meanwhile, back at the IRP, government is lining up the nuclear fleet to supply the ferrochrome smelters that the TNCs won't be building without a more competitive energy subsidy. ✕



Africa breathes life into mercury treaty

by Rico Euripidou

Is the fourth session of the **Intergovernmental Negotiating Committee** to prepare a global legally binding instrument on **Mercury (INC4)** going to deliver? This is the million dollar question that we ask ourselves daily as we engage in challenging mercury from every aspect – from the polluted environments to policy and multi-lateral negotiations at the UN level. African governments are taking this process to heart and have placed much energy and thought into the international process. They are considering various approaches, the first being the setting up of inventories to look at where mercury is found, emitted, stored and dumped. African governments are working towards making the UN global mercury treaty a living reality. Africa is one step closer towards creating a mercury-free environment

Through a mercury profiling project it became clear, however, that the mercury knowledge of the African region involved in the mercury treaty INC was out of date. Therefore, based on various criteria, Nigeria, Mali, Cameroon, Gabon, Egypt, Ethiopia, Zambia, Kenya, Tanzania and South Africa became part of a project that used UNEP's new version of the "Toolkit for identification and quantification of mercury releases" to develop mercury inventories for these African countries.

The overall objective of the project was to train the countries in using the toolkit (in a workshop conducted in September 2011), and thereafter to give countries dedicated technical support while they are developing and finalizing their inventories. To date, nine countries that have participated in this project have submitted draft inventories and are well on their way towards finalization. This information will be useful to inform the African regional and national policy-making towards the current negotiations, to identify priority mercury sources in the respective countries and to provide a baseline for national mercury management activities.

The first level of the inventory project has shown that, while mercury emissions and uses in individual African countries are relatively small, collectively

the Region has significant emissions from the following sectors: ASGM, waste and products and, within Southern Africa, from power generation. It has been determined that the main release source categories in these African countries include: power generation, mining, manufacturing of steel and nonferrous metals, cement, chemicals and waste disposal. Significantly, these data have never been collected before in African settings and now that a picture of the scale of the problem is emerging African governments can begin to understand and make priority decisions about which pollution, such as unregulated medical and waste disposal and open burning, to deal with first.

The next steps

groundWork, together with UNEP and the GEF, is in the process of initiating the second phase of the inventory project, which will also occur regionally. This is because, now that the various gaps in the mercury inventories of the countries have been identified, they need to be bridged. This new project will provide the tools and means to evaluate mercury uses and releases in the African region, and hopefully further serve to integrate mercury in the environmental agenda in the African Region, as well as facilitate the design of a sound programme for mercury release reduction.

The countries that will be invited to participate in this project are countries that have already submitted inventories, provide a geographical balance across the African region and have mercury issues that are prevalent in the region, so that their experiences can be used as an example by others.

By the end of this project we expect the African Region to produce robust and detailed national inventories and action plans for mercury in the participating African countries. African countries will then share their experiences in using the mercury inventory toolkit with other countries, as the information, lessons learned and good practices identified, and recommendations developed, become available. ✕



The scourge of industrial pollution

by Caroline Ntaopane, Air Quality Campaigner at VEJA

Industrial chemicals have become a part of our daily lives. It doesn't matter whether you are poor, rich, Black or White, pollution affects us all. Workers are more affected because they live and work in the chemical industry. Our industrial system has forced workers of the low and middle classes to choose between long term health and environmental impacts and short term survival. We now know that industrial pollution causes serious health problems such as cancer, asthma, skin diseases, problems with breathing, nervous system damage, and reproductive health problems such as birth defects.

In 1993, the government promulgated the Occupational Health and Safety Act, with the purpose "To provide for the health and safety of persons at work and for the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health with the activities of persons at work; to establish an advisory council for occupational health and safety and to provide for matters connected therewith". Despite this, occupational injuries, diseases and fatalities continue to plague our country. People die from these workplace incidents and occupational diseases, and there are thousands of injuries that cause lost time from work. Each year, the pain and suffering affects thousands of workers, as well as their families, communities and workplace.

For the past twelve years hundreds of old, sickly men have gathered in Sebokeng Zone 11 stadium every Wednesday and Sunday. These men worked for ArcelorMittal for many years before they were retrenched. They gather to talk about their illnesses, which they believe are caused by ArcelorMittal. They are suffering from illnesses related to eyes and ears, lung diseases, cancers, asthma and many others. Some of them said their doctors confirm that they are sick because of pollution but ArcelorMittal still denies this and refuses to take responsibility.

In their fight they have been joined by the Vaal Environmental Justice Alliance (VEJA), which has campaigned tirelessly for ArcelorMittal to remedy

decades of water and air pollution in Vanderbijlpark and its bleak, polluted surrounds. But, despite years of shouting, no one has listened. This started in November 2010, when ArcelorMittal began a screening project, contracting an independent local doctor to examine around 190 ex-employees and "investigate them for diseases most prevalent in the steel-making industry". These occupational conditions include noise-induced hearing loss, obstructive lung disease, pneumoconiosis (lung dust disease) and renal damage due to possible occupational heavy metal exposure.

But for most of the ex-workers the result came back saying that no one was sick and that every one of them was fine. The result came as a shock to most of them. Remember, many of these workers are people who were medically unfit to work; now they are said to be healthy? It doesn't make a sense.

For twelve years, ex-workers marched to ArcelorMittal and had a number of meetings with the company. Their voices were loud and clear but still no one listened. Eventually, after the screening test, ArcelorMittal identified only fifty-seven people who might possibly have occupational diseases but claimed that they still needed to be re-evaluated for further investigation. The number of former ArcelorMittal workers who contracted occupational disease could be far higher. There are workers who are suffering here in the Vaal and at the Pretoria and Newcastle plants. But ArcelorMittal told us they only have funding to test 200 ex-workers, even though they registered R283 million for their first quarter profit this year.

People in Vanderbijlpark, Boipatong and Sebokeng suffer from the same illnesses as the workers do. Dust blows directly into their houses, and to remedy the situation ArcelorMittal gives people milk to drink for dust control and puts new roofs in the houses as part of their community 'upliftment' programme. And it's laughable to hear ArcelorMittal say the screening project is uplifting to the community. How can you uplift the life of someone who has cancer, someone who cannot provide for his family anymore? ☹



My land, my life: land grab in Durban

by Megan Lewis

"The land means the world to me in the sense that I'm here six days a week from 7 in the morning till 5 in the afternoon and when I get home it's only my farm that I think of and nothing else. So it's my livelihood and I would like to be on the land."

This is Siga Govender's last wish. Siga works on the fertile land found next to the old Durban airport in south Durban, KwaZulu-Natal. He has worked in the area for thirty-six years and on this particular piece of 14 hectare ground for twenty-five of those. His grandparents arrived in the country from India as indentured labourers in the 19th century, and began farming shortly after their entry into South Africa, passing their love of farming on to their children and grandchildren. Together with his wife, Siga grows vegetables like spinach, cabbage, lettuce and beetroot, herbs like mint, thyme and coriander (or dhanian, as it is known by the Indian community) and flowers such as marigolds. His son and daughters have always been involved on the farm, transporting the produce to the local morning markets in the city and surrounding areas, and working on the land to plant and harvest the crops. Although they are studying and pursuing other jobs at the moment, Siga sees his children taking over the land once he has grown too old to continue farming.

Siga and his family are part of a community of farmers on this land; they hold one of the sixteen farms. They are evidence that, despite the continuous onslaught of industrial expansion which makes south Durban a renowned pollution hotspot, there is life arising from the land and the people have continued to create a life for themselves. The basin is home not only to dirty industries but also to more than 200 000 people whom the farmers feed with their fresh, cheap produce. Like Siga, most of the farmers have had land in the wider south Durban area passed down to them from their forefathers and mothers who made the journey from India to South Africa as indentured labourers in the 1860s. In comparison, big industry arrived in the area more recently, beginning operations in 1930 and intensifying from the 1950s onward.

There has always been farming in south Durban. Ironically, however, people of Indian origin were allowed to work the land here because, under British colonial rule, they could not get land north of the Umbilo River, closer to the city. This was only for "white" people. The farmers were pushed from pillar to post during apartheid and finally, in the late 1980s, came to settle on the old airport land.

Whilst the farmers have been welcomed by the surrounding communities, residents have mostly been hostile to the degrading and dangerous actions of the big industries like Engen, Sapref and Mondi. For many, the farmers are part of the life-blood of the south Durban community as they support not only informal and local markets like the Bangladesh market, but their impact is also seen throughout broader Durban as they support chain supermarkets like Shoprite/Checkers and OK stores. The farmers are an important part of the wider Durban community. Siga explains their role in providing food security for the people:

"We supply food that is fresh, number one, and the other thing is it's cheap in the sense that we are close to the markets. And if we don't supply to the thousands of people who buy from us, they will actually be deprived of their daily food."

Despite this, the displacement of the farmers has been an on-going threat. Siga was previously displaced from land that was also part of the old airport land but which was sold to Sasol Fibres and has subsequently been changed into a warehouse for Jet clothing company.

Kista Govender has been Siga's farming neighbour on the airport land from the beginning. His parents were part of the group of farmers from Springfield in Durban who were moved to the airport land during the industrialisation of the area by the city and big business. And this can happen again at any time in the future due to the nature of the contracts that the farmers work under. These contracts were granted to them by the House of Delegates (the house of Indian representatives during the South African transition government) in the 1980s and



were subsequently taken over by the Airports Company of South Africa (ACSA). The contracts state that the farmers can be given a thirty-day eviction notice which will leave them without a place of work within a month. For Kista this means the loss of a sustainable life and stable income:

"I got used to working and so I can't stay at home. I rely on the farm. If I don't work here I can't do another job. I'm not collecting an old age grant; I work for my living."

Other plans for displacement were proposed by the city in conjunction with Toyota, Transnet and various other surrounding industries and businesses. As a result of this, the farmers set up the Airports Farmers Association (AFA) with Siga as their chairperson in order to fight for the farmers to maintain their right to a sustainable livelihood and to provide food security to the people of Durban. In 2005, when ACSA sent out development plans, the South Durban Community Environmental Alliance (SDCEA) joined AFA to keep the land for the purpose of farming rather than for the expansion of industry. They won this battle, but today they face a new one.

The proposal of a R1.8 billion dug-out port lead by ACSA and Transnet was confirmed this year in both President Zuma's State of the Nation Address and the budget speech by the Minister of Finance, Pravin Gordon. The rumour has been concretised, and is being portrayed in the media as fact. It is through the media and communication by SDCEA with the government, ACSA and Transnet that the farmers have found out what the consequences of this new development could be for them. The farmers are yet to hear directly from either of the above parties; there is no line of communication between them even though this might have huge consequences for the lives of many people.

Savy (or Sally as she is known by the rest of the farmers) Govender has been farming with her husband since 1989, providing for her family, the labourers on her farm and the community. She speaks of "the one house, one garden" strategy proposed by KwaZulu-Natal's premier, Zweli Mkhize, in 2009, and how this is being contradicted by the construction of the dug-out port and the displacement of the farmers:

"I think they (the government and ACSA) are very unfair because you hear on the TV every day the government wants everyone to do subsistence farming. They're encouraging people to grow their own food. So we are actually growing for ourselves and for many more people that we are supplying to. Because how many people are actually doing farming these days? We would love to be here a long time, but the government is being unfair to us; to them we are nobody."

The neo-liberal economic policy of the South African government has been heightened with the introduction of the macro-economic Growth, Employment And Redistribution (GEAR) Programme in 1996. The consequent promotion of privatisation, a decrease in trade and industrial regulations, and minimal state involvement in these sectors, have left the majority of the South African population unprotected from environmental and social injustice. In the case of the farmers, growth and development for the South African economy means the removal of their place of livelihood and, for the wider south Durban community, it means the extraction of a sustainable source of food.

This South African scenario is not very different to that found in various other countries around the world; elites found in the government, corporate and industrial world forget the needs of the citizens of the country in which they operate as they prioritize the lining of their pockets. The elite's development model of increased wealth for a few determines the mass poverty of the majority.

The land is not simply soil and plants to the farmers, but is closely tied to their sense of heritage and cultural identity. Siga will continue to fight for his wish to become a reality and, with the rest of the farmers, will strive to maintain the life they desire:

"Here we are, sixteen farmers who are established and have for twenty-five years been farming in the area. Instead of assisting us, they want to get rid of us and get us off the land. I don't know if that is on their mind, but if it is, then that is sad. I feel positive that we will stop them in the sense that we will get public support in the matter because it's something that they need and something we supply on a daily basis. So we need the public to support us." ✕





The farmers are not the only ones to be displaced. Farm labourers will also be out of work and will not be able to support their families

Photo: groundWork



Smoke stacks form the backdrop for many of the farms. Despite this, the farmers grow abundant, fresh produce and flowers like these marigolds.

Photo: groundWork



In his book, titled *Deforestation: Why YOU need to stop it NOW*, Leigh Collingwood doesn't speak of forests and deforestation in isolation. Rather, he breaks the book into five parts, each dealing with various aspects of the current world paradigm that are linked to deforestation. He posits deforestation as both the symbol of the flawed nature of our world economic system as well as the largest human contributor to climate change and global warming.

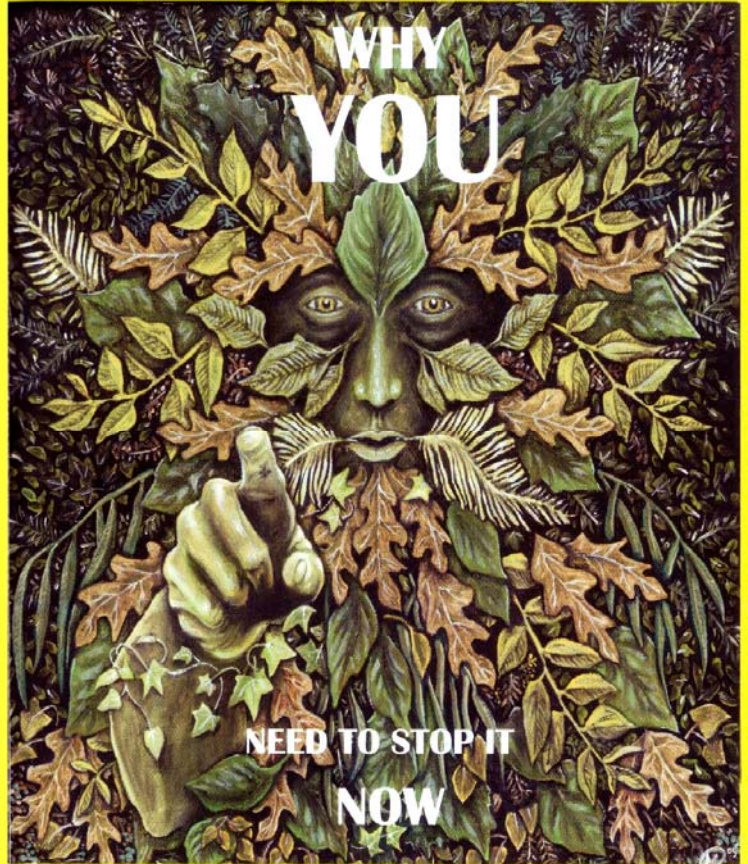
The book begins with a detailed look into our ultimately unsustainable economic system, which is pervasive in its consumption of natural resources such as fossil fuels. He enlists the reader to grapple with the second law of thermodynamics in order to understand that any energy usage that is greater than that of the sun, reckoned on a current inflow basis, will inevitably lead to environmental degradation and injustice; some people will have, at the cost of others not having. It continues to interweave deforestation with the peak oil crisis and climate change, finally ending in a philosophical engagement with why it is up to the individual and collective groups to be aware and take action.

Despite his discussion around the peak oil crisis, Collingwood does not see alternate or renewable sources of energy as a viable answer. Here he uses the second law of thermodynamics to explain that they are not sustainable as they produce energy at a level much lower than our current use of fossil fuels. He denounces the International Panel on Climate Change (IPCC) as intentionally neglecting deforestation as the main cause of global warming, as vested interests in the sector will increasingly use forests for biofuels, agriculture and to save the oil-based system, instead of facing the reality of the peak oil crisis and the need to cut back on our energy consumption.

Collingwood writes from the perspective of someone who has not studied these topics at an institutional level, but has nevertheless read extremely broadly in his own time to keep himself informed. He understands what the impact of having an 'ostrich

DEFORESTATION:

WHY
YOU



LEIGH COLLINGWOOD

attitude' could have and now, through his book, he engages the public to not only become aware but to also take action against deforestation and a range of interconnected destructive systems and processes.

While it is subtitled "The commonsense guide to deforestation and what to do about it", this book might not be an easy read for the average reader. It has, in fact, been labelled more of an academic thesis by some readers, due to its depth and breadth, and the technical nature in which the author tackles topics lends itself to this perspective. Nevertheless, while it may be heavy going at times, it is worth dedicating time to work through it as what it speaks about affects everyone, even if some are not necessarily aware of the scale of the problem.