

THE Ecologist

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NOVEMBER 2001

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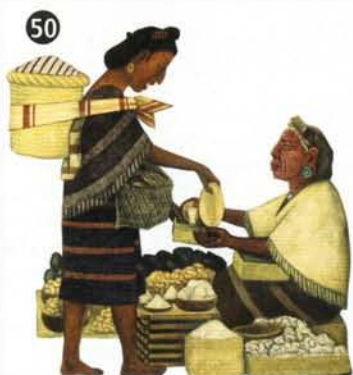
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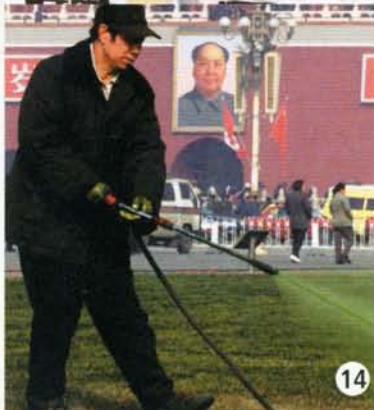
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Needles in every haystack

On Sunday 7 October America dropped the first of many bombs on Afghanistan. And to show that this was going to be something of a 'humanitarian' war, large bundles of food were dropped at the same time. In fact, the amount of food involved was minuscule in comparison to the country's needs, but the show was a success, and images of American food bags, with crude 'USA' markings that would embarrass Ronald McDonald, were blasted from every part of the media.

But if Mr Bush predicts victory in the war against terrorism, he is wrong. For the problem America faces today is unlike any it has faced before, and two factors render the traditional missile approach utterly useless.

The first, simply, is that the conditions of modern civilisation, from nuclear power plants to centralised water installations, could not be more suited to terrorist ambush. We have built for ourselves a giant stack of cards that is vulnerable to the mildest of winds, and against which the only safeguard, as Aidan Rankin points out on page 47, is decentralisation on every level.

The second is that there is no traditional enemy. When Israel's Netanyahu argued that we should forget looking for needles and focus instead on the haystacks, he was effectively advocating bombing us all. For the world is the haystack, and its every corner teems with people that not only loathe America, but consider it their duty to undermine her. It doesn't take much thought to recognise that a world whose 'stability' is maintained only by the grace of missiles is not a stable world.

So what is the solution? Yes in the short term, America was theoretically justified in seeking to root out those responsible for the New York massacre, if only to ensure they do not repeat what happened. But to regard such a course as a solution is madness. These were not random deeds of the mentally unstable. They were extremes of a large movement that is gaining ground globally, and which takes nourishment from every act of American aggression. America has so far chosen to avoid addressing the reasons for its own unpopularity, but the very fact that there are thousands of people in more than 60 nations willing to die for a cause, should at least prompt a cursory analysis into the nature of that cause.

Fundamentalism is not a condition that naturally and inevitably affects certain races. It is a reaction to perceived threat. Anthropologist Helena Norberg-Hodge has described that the relations between Buddhists and Muslims in Ladakh, where she lived for 20 years, polarised in exact proportion to the extent to which Ladakhi people lost control of their self-sufficiency and autonomy to an alien economy.

The greatest threat today to people's politics, economies and identity must surely be the global economy whose pillars ensure that virtually every nation is under the spell of America's corporations. The massive power of the World Bank and IMF for instance is routinely used to open doors

for America's blue chips, and the World Trade Organisation in its short history has consistently favoured the interests of the multinationals over those of nation states.

Norberg-Hodge has compared corporate globalisation to a Jihad. Reading through the annual reports of some of America's biggest companies, it's not hard to see why. 'As I look to the future,' writes the CEO of Campbell Soup Company to his shareholders, 'I shiver with business excitement. That's because Campbell Soup Company is engaged in a Global Consumer Crusade.'

America is certainly in a difficult position, and unless its every move is honest and open to scrutiny, it will necessarily be accused of using international empathy to further its overseas interests (see Mr Blair's use of current events to rush through unacceptable domestic policy). US retaliation against those responsible for the New York carnage is one thing. Rooting out 'evil-doers wherever they may be', is another. For a lot of people, that sounds too much like a blank cheque. It goes without saying that one man's terrorist is another's freedom fighter, and every corrupt nation has its own. If Kashmiri separatists are terrorists for instance, as the Bush administration announced, for using violence to free themselves of an artificial political association with India, where does that leave opponents of Saddam Hussein or the people of East Timor? And what if the Tibetans were to counter vicious Chinese occupation of their land with violence? Would that too be terrorism?

If this is a war against terrorism, then we must at the very least define what is meant by the term. The OED describes it as: 'the systematic use of violence and intimidation to coerce a government or community into acceding to specific political demands'. But if that is correct, what has been America's treatment of Pakistan, if not terrorist? Overwhelmed by massive debt, poverty and drought, Pakistan is in no position to support the battles of a far-off nation they regard with justifiable suspicion, and whose recent plight pales into comparison next to their own. On even turf, they would have remained neutral, but through intimidation they had to capitulate.

In the meantime, it is unfortunate that critics of economic and cultural globalisation now find themselves, apparently, in bed with a force whose aspirations are quite different to their own. Osama Bin Laden, guilty or not, is a globaliser. He cares little for diversity of culture, opinion, custom and tradition, all foundations for a sustainable and stable world.

But campaigners must not be intimidated by false insinuations that to criticise American policy is to support terrorism. Britain and Stalin shared a loathing of Hitler. That didn't make Churchill a communist. The fact is, if the world is plunged into ecological, economic and social catastrophe, it will be largely because of America, not least following Mr Bush's refusal to combat catastrophic climate change. Bin Laden is a serious danger. But so too is Mr Bush.



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Please attach your name and postal address, even when sending by email.

The editor reserves the right to shorten or edit correspondence where necessary.

Making bones

I really felt compelled to reply to Bruce Friedrich and Sally Fallon's debate regarding veganism. Does Mr Friedrich really believe that there is 'no such thing as a meat-eating environmentalist'? I must remember not to bring my ham sandwiches next time I am supporting a local environmental project with my time and energy.

The argument for veganism was filled with emotive language, utterly flawed and was completely outlined as being just that by Sally Fallon. If all Mr Friedrich can do is rely on reiterating throughout his argument the fact that factory farming is cruel and inhumane, something that the environmental movement is aware of and has been fighting to change for some time, then I feel he is completely missing the point. The key to this debate is sustainable, community-based agriculture. Surely the kind of eco-facism that Mr Friedrich is supporting does nothing to build communities and move society in a sustainable direction?

Debbie Carson, Strood, Rochester, Kent

Taking the bait

What wonderful, altruistic, selfless human beings anglers are, according to Nick Fisher (*Fishing for compliments*, vol 31/8). They devote hours of their time to assiduously cleaning our rivers, erecting fences, clearing

silted gravels, building 'groynes' and 'faggots', removing garbage and building hatcheries; all because 'fishermen love fish' and 'they want to relish the river'. How meritorious their efforts would be if undertaken solely to provide fish with a healthy environment; if they did the work and then left the fish in peace to enjoy it.

As it is, the beneficial environmental work they achieve is outweighed by the environmental damage they cause (apart from killing and damaging fish). As Malcolm Greenhalph stated in *Salmon Trout & Sea Trout* (July 1993): 'Each year more waterside birds and mammals die because of discarded monofilament than all the swans that ever died of lead poisoning'.

Those fishermen 'who never kill fish' nevertheless traumatise and damage them. The moment the hook, be it single, double or treble, whether barbed or otherwise, bites the flesh, the fish's suffering begins. When a fish is pulled from the water it starts to drown in the air. Removing the hook involves handling the fish causing damage to the mucus that protects its scales. This may result in infection and a possible slow death, unseen by the predator of the damage. After release it can take a fish 24 to 72 hours to recover physiologically during which time it is vulnerable to predators. Sometimes the fish breaks the line and escapes with the hook still embedded in its

mouth, eye, gills or stomach. Death in such cases is extremely likely. Thus in a variety of ways fish suffer and die as a result of being caught and released by anglers.

Fishermen do things to fish that would not be allowed under the Animals (Scientific Procedures) Act 1989, to be done to animals in a laboratory without good medical or scientific justification.

Fishermen insist fish do not feel pain. Common sense dictates they do. The NAFA report on the subject concedes that, 'there is not... firm evidence that fish perceive pain as mammals apparently do or, conversely that they can not perceive pain as mammals do'. As pain is a basic warning system by which we all, human and animal, learn what is harmful to us, it is logical to assume that fish also need pain perception as an aid to survival.

May I, for the sake of accuracy, make some small amendment to Nick Fisher's assertions – fishermen love to fish and they just want to relish catching fish from the river.

Myrna R Forrester, Aberdeen, UK

What's left...?

I hope you will grant me the indulgence of a reply to Paul Kingsnorth's criticism of my letter (vol 31/8). I ask for this because Kingsnorth misquotes what I wrote. He makes me say: 'We all agree that power can be dispersed', whereas what I wrote, and you printed, was: 'We (meaning Kingsnorth and myself) can agree that power should be dispersed.' The difference is clearly fundamental, yet Kingsnorth builds his argument on that misstatement. If he is saying that leftist groups are often sectarian I agree with him. But his dismissal of Marx is laughable. Marx and Darwin are the two most important thinkers of the modern world. Marx did not 'devise a vast blueprint', he analysed the capitalist system and warned against its terrible dangers, which we are now experiencing in the most virulent form. I need no lessons in ecology or grassroots action from Kingsnorth, having been involved in ecological thinking since the mid-sixties and a reader of *The Ecologist* since its very first issue. I am also a member of the Globalise Resistance movement.

In other words I share Kingsnorth's view that 'real change comes from below... through local action'. The trouble with his analysis is that he begs every question with his airy generalisations. Again, what sort of 'alternative systems' does he mean? Unless these local systems get rid of the capitalist profit motive, nothing will change.

MILLBANK TOWERS



NESTLÉ SUCCESSFULLY LOBBIED GOVERNMENT AGAINST VACCINATION DURING FMD CRISIS



One voice from many mouths

Kingsnorth shows no understanding of the capitalist paradigm and the need to replace it with a system that ends forever the growth of huge corporations that dominate world politics.

Andrew Lockhart Walker, Dollar, Clackmannanshire, Scotland

...and what's right?

Andrew Lockhart Walker writes to rebuke Paul Kingsnorth for not genuflecting on hearing words like 'comrade' and 'proletariat' and suggests the former conveys the idea of friendly co-operation and that the latter is an identity label for the world's destitute. They do nothing of the sort, they are indelibly tainted with former Soviet rule which was one of the most ruthless, oppressive and murderous regimes in history. And when he goes on to declare 'the opposite of capitalism is socialism' he misses the nail by hitting his own thumb and registers his unawareness that both are variants of centralised super-state control. He appears to have learned nothing from the communist experience nor from the antics of Prime Minister Blair, who has accomplished the incredible feat of creating a brand new Conservative party out of the ruins of the former Labour movement. There is hope for him yet when he expresses his agreement that power should be dispersed, but when he despairingly asks Kingsnorth how this should be done he appears to be oblivious that the answer is right under his nose. If you want local power Andrew, stop bandying windy totalitarian words such as capitalism or socialism, just get on with it! There is no alternative to localised power that does not involve endless hypocrisy and betrayal and if you want some of the theory of it, try reading Leopold Kohr's recently republished *The Breakdown of Nations* or, for that matter, my own work, *Small is Powerful*.

John Papworth, The Close, 26 High Street, Purton, Wiltshire SN5 4AE, UK

Mast politics

Re: your piece *Hold that call* (Vol 31/8), I recently spearheaded a successful battle against the installation of a 25-metre base mast adjoining a part of Enham village that houses the severely disabled. None of us knew much about the subject when we started, so it was a very interesting learning experience, with some very disturbing undertones. We were told very early that councils have been instructed by government not to reject applications for base stations or masts on health grounds and that environmental health departments

Where do we go from here? What will happen to the spreading movement against globalisation in a world where Manhattan has a new skyline and Dubya has a new war? This is the question on the lips of the 200 or so activists from around the world who have gathered in Cochabamba, Bolivia, for the third international conference of Peoples, Global Action, a network of grassroots groups from five continents, united in their opposition to the corporate takeover of life.

One thing becomes clear within minutes of the first delegates arriving in the country: this new world is harder, more repressive and a lot less willing to listen. It only took a day after the horrors of New York and Washington for one American Senator to say that 'eco-terrorists' might be responsible. It took less than a week for George Bush to announce that NGOs could be 'front groups' for terror. That, it seems, was just the start. In Bolivia, we saw how the mass murders of Manhattan are likely to be used in the future to justify a crackdown on dissent of all kinds.

The first group of activists didn't even make it through immigration at La Paz airport before they were detained by the authorities and threatened with deportation. Phone calls from a local supportive MP eventually got them through, though it was touch and go for many. One man, a tribal activist from Papua New Guinea who had travelled for days to get here, was held at the airport for two nights, and only escaped deportation because all the planes back were full. Meanwhile, out on the roads, officials from the US Drug Enforcement Agency were boarding buses, dragging off anyone who looked like a troublemaker and checking their papers.

It got worse. One day into the conference, the governor of Cochabamba announced that a group of 'terrorists' was holding a meeting in his city. Soldiers were seen mooching around the conference centre and the local press went into a frenzy. PGA refuted the allegation with a mixture of humour and outrage, and the conference went on. But if this is what happens to us within a week of the attacks, what will it

were told to stay out of this dispute. We ignored these restrictions, not only submitting health information but also sending copies to the local environmental health officer.

We also queried, at an open council meeting, the fact that (similar to pesticides) this area of technology was developed and marketed before proper and independent

be like when America's war against the world really gets going?

PGA was born three years ago, as a means of linking diverse local struggles together to oppose corporate globalisation. In that aim it has been more than successful. It is difficult to underplay its achievement in bringing so many diverse peoples, groups, ideas and realities together. In doing this, it strengthens, inspires and empowers them all, makes links where none existed, and finds common ground for opposition and proposition. It is a fascinating and inspiring experience.

I didn't know quite what to expect when I turned up. When I left, I was convinced more than ever that there really is a global movement; something new, something diverse and something remarkably powerful. Just look around the dining tables at lunchtime; where else in the world can you see a Bangladeshi *adivasi* sitting next to a Maori warrior, a Russian ecologist, a Bolivian coca farmer, a New Guinean tribesman, an English anarchist, a South African anti-privatisation campaigner, a Canadian trade unionist, an Afro-Colombian and a Chilean human rights activist who was tortured by Pinochet? Where else can you experience these many worlds meeting and fusing to work towards something entirely new?

To see this is to realise the power of this movement, and how difficult it will be, even in the wake of the American horrors, to quell its growing voice. But it won't be an easy ride. What will be the future for big protests around international summits, if any? How will we react to state repression? How will we make our voices heard amidst the war clamour and the hardened minds? We all have to answer these questions in the months and years to come. But we will. We have to.

Every month, Paul Kingsnorth reports from one of the world's centres of resistance to the global economy. He is currently writing a book about the new global resistance movement, to be published by Simon and Schuster in spring 2003.

research was done on, eg, effects on human health. We then asked whether, if any health information is considered, it is only 'official' science, or whether it included unofficial findings. Only 'official' science, we were told.

I asked if they realised that the WHO project would not be completed for some time and whether they realised that there

■ seems to be some correlation between chemical sensitivity and electrical sensitivity. The answer made clear that all this had not been considered but that government instructions were clear. So we asked if there existed a document with the government's policy and whether we could have a copy.

At that point everything became rather fuzzy, and we were told that this was an issue that we had to take up with our local MP, which we have done. I personally was alarmed, having been a pesticide victim for over 13 years, to find that exactly the same language is being used in this technological assault, apart from one exception. 'Benefit-risk' has become 'Benefit-perceived risk'. The original equation was always incomplete and should have been 'Benefit-risk-damage'. The benefits are the industry's. The risks are the public's. The damage usually becomes the sole responsibility of the victims. To date pesticide damages remain unadmitted, unrecognised and unhelpt. This also looks likely to be the result of this new wave of unresearched, already-marketed technology around masts and mobile phones. Let's be precise in our language – 'Benefit-Risk-Damage' is the current equation, and let no one forget it.

Margaret Reichlin, Andover, Hampshire, UK

Sleepless in Sheffield

Aidan Rankin has given us the standard, false, poor-weeping-farmer propaganda (*Sleepless in Settle*, vol 31/7) favoured by the media. I'm sorry to see it in *The Ecologist*.

The truth is more like this: there's no attack on rural life. The livestock industry – big business and small – has brought the situation upon itself and the rest of us by exploiting animals to the point of breakdown and then carting them from market to market all over the country. Viva's recent undercover investigation of 18 British pig-farms found filth, injury, disease, death and brutal neglect everywhere. In the sheep-industry, 20 per cent of new-born lambs die on average from exposure, starvation, and disease – callous neglect again. Ideal conditions for the spread of an aggressive infection like FMD.

'Country folk' is a propaganda phrase. It implies benevolence and virtue. Yet from those folk has never come a whisper of objection to the vile conditions at their local piggery or the wretched health of the sheep on their moors. Nor do the farmers who, Rankin absurdly claims, think of them as individuals, hesitate to send their animals to the barbarities of cattle-markets, abattoirs, and nightmare long-distance journeys to primitive Mediterranean abattoirs.

Animal rights societies issued a torrent of press-releases and interview-requests, virtually all rejected by a hostile media. Had we demonstrated peacefully we'd have been ignored, and if we'd obstructed MAFF the media would have been on our backs with Animal Fanatics Attack MAFF's Mercy Killers or some such malignant distortion.

Anyway, we must not have more than 500 for a provincial demo. Where are the 100,000 farmers?

The Blair government, like all its predecessors, has bent over backwards to shower subsidy, reliefs, guarantees and compensation on farmers and continues to do so. And still farmers demand more, snarling at the despised townies whose pockets it comes out of, and to hell with animals' welfare and to hell with the tourist trade.

I see at work the hand of the Countryside Alliance, who have cleverly appropriated all rural dissatisfactions to give their bloodsports campaign an easier ride.

Readers will have noticed that Rankin, sitting there at the top of the article in his pullover with padded shoulders for shooting, brings the subject in as an instance of government hostility. I doubt that he need worry. Having dodged and foot-dragged for four years, over-riding a 400 to 150 majority in the Commons, Blair remains evasive about a hunt-ban. And as for farmers, I greatly fear that nothing will change, for DEFRA is simply MAFF, with the same people, under a new name, giving their minister the same old advice.

Michael Maas, Rivelin, Sheffield, UK

Long distance effects

Your October issue – 'Mobile phones: the problem's getting bigger' – was good at exposing their risks to our health. However it didn't mention the nightmare impact they are having on the health of the Democratic Republic of Congo (DRC).

Mobile phones contain coltan, a mineral more profitable than gold. The massive increase in mobile phones has led to warring rebel groups in the DRC, many funded and supplied by Rwanda and Uganda, exploiting coltan to help finance a three-year bloody civil war. Seven nations are involved and it has been called Africa's first World War.

Since the outbreak over 2.5 million people have died, more than two million are internally displaced and more than 16 million face 'critical food needs'. The mining is also causing environmental destruction. Endangered gorilla populations are being slaughtered as coltan is illegally plundered from Congo's protected national parks.

The UN says that companies trading

minerals are the 'engine of the conflict'. The link between the bloodshed and coltan has caused alarm among some high-tech manufacturers. Copying the protests over diamonds from war zones in Angola and Sierra Leone, trade associations have launched a campaign to stop buyers from purchasing their coltan from Congolese sources. People are urged to steer clear of 'blood coltan'. However it seems doomed to fail as it is almost impossible to know the original source of the metal.

The DRC remains a forgotten emergency. The humanitarian crisis in the DRC has been described as one of the worst in the world. The fighting has led to appalling levels of hunger, disease, and death, and to countless abuses of human rights.

The international community must give more support to the peace process, more humanitarian aid, and make more effort to tighten up arms export procedures to ensure that shipments of weapons do not further fuel the war.

Philip Booth, Nailsworth, Stroud, Glos, UK

Double the pain

I have read Mr Devinder Sharma's comment (*Starving the world of good sense*, vol 31/7) which I find quite interesting and useful. The implications of the 'paradox of plenty' are so many. It is harmful to both, that is to consumers as well as producers. This very year producers had to affront inappropriate costs and in relation to their sales. Their sales were far below their production costs and farmers are getting caught in the net of debt. According to that UNDP report, India's rank is 115. This index is based on a combined measure of longevity, educational attainment and the ability to buy basic goods and services. The UNDP has indeed suggested some bizarre argument to alleviate poverty – like vaccines against malaria, HIV and TB, high-yielding pest-resistant drought-tolerant varieties of staple foods plus low-cost computers and wireless means of telecommunication. There would be a danger of corporate conspiracy in Indian farming.

Suresh Diwan, Hoshangabad, India

Wave reaction

As a mobile phone user, I was shocked and horrified to read David Edwards' article (*Hold that call*, vol 31/8). Before I photocopy it and send it together with my Motorola to the Orange shop from whence it came, I thought I should draw your attention to the government's adoption of the eerily familiar-sounding 'precautionary' measures with respect to telecommunication masts. In a letter to the *Financial Times* (28/8/01), David Jamieson MP lauded the new 'precautionary' approach favoured by our



Not so Rio grand

government which, he is sure, will strike 'the right balance by improving the consultation with local people and giving the 45 million people who use mobile phones the service they want'. Will local communities actually have the power to effectively turn down mast applications, and will demands for lower frequency masts not lead to their wider proliferation nationwide? If anything, such a 'precautionary' approach seems to advance one of those non-choices where the actual 'choice' local communities are confronted with, is deciding which groups are to have the most exposure to radiation.

Thus it is hardly surprising that the Sir William Stewart Report 'did not recommend a ban or minimum distance on masts on schools, hospitals or anywhere else' – and yes, it is upon this very report the government's 'precautionary' approach is based.

Esther Perkins, London, UK

Defined priorities

Just got the current edition and I think the last of my current subscription. The only thing I liked was the letter from Howard Cheney (Vol 31/8); a rare glimpse of reality and unpalatable truth.

The rest of the edition has a flavour of recycled consumerism but maybe that's what most of your readers want.

I like the Earth and the big problem is too many people wanting too much stuff. The scale of the on-going eco-catastrophe is such that the terrorist strikes in America or the problems of mobile phones are really not very important.

What would interest me are thoughts about why we humans are so destructive. Are we suicidal? Are these problems philosophical or religious or caused by dragged evolutionary baggage? What is there in the human psyche which makes us like we are? Tiny brain currents make us globally destructive. Can we overcome these?

If not where, when and how will humans finally come to grief? What happened to the 'Limits to Growth' analysis? We must be 30 years on from there. How is it shaping up? What will happen to the world after industrial society? What are the endgames and follow-up scenarios? Are there partial catastrophe scenarios which will leave the planet still ecologically intact?

There is loads of stuff that could be interesting and important. I used to find some of it in *Resurgence* but its grinding optimism finally got me down. I'm certainly not finding any new ideas in *The Ecologist*.

David Goodwin, Normandy, France.

Next year's UN World Summit on Sustainable Development in Johannesburg will be epoch-makingly significant, or so we are told. But how many environmentalists in the UK know whether the summit concerns them, or even that it is happening? Preparations now taking place seem to belong to a world remote from ordinary environmentalists. It is a world of acronyms, numbered agendas and policy wonks.

This introspective world is clear even from the event's title. Currently it's not known as the 'Johannesburg Summit' but 'Rio+10' because it will be ten years after that all-important Earth Summit in Rio. Granted that was the first time world governments had taken the environment so seriously. But what does 'Rio' mean to the new generation of activists under 25 years old?

Try and find out more about it, and you run up against the industry of environmental policy-making. Acronyms abound. So do abbreviations. Currently the World Summit organisations are talking with excitement about 'Prep 1 Coms'. They talk of 'inputs' and 'outputs' and have 'capacity building sessions'. For those outside, the language is bizarre and excluding. Even for those like myself, actively involved in environmental issues, Rio+10 is a puzzle: is it or is it not something that ought to involve me, do I have a contribution, how do I find my way in? The whole show feels like an exclusive gentleman's club with rules only understood by the cognoscenti. And if I feel like that, imagine how it seems to those in the developing world.

Central to the problem is language. The UN is a huge bureaucracy and as such has spawned its own speech and even lifestyle. Only those directly involved understand about 'directives', 'protocols', 'quotas' and 'non-compliance'. Nothing shows this up more clearly than 'Agenda 21'. The title says it all or not as the case may be. Recently people may have heard references to initiatives under 'Local Agenda 21' – modest but worthy local council schemes for transport or wildlife. Some may even be vaguely aware of a Rio connection. But Agenda 21? I wondered what the other 20 agendas were until I discovered it refers to a blueprint on sustainable development for the 21st century.

Maybe this obscurantism is inevitable once grassroots politics move onto the world stage, the price paid for diplomacy-led initiatives which can achieve hard policies on an international level. We've begun to see that internationally agreed policies like the Kyoto Protocol can be hugely important both in increasing public awareness and in determining national government priorities. So perhaps we should hold off with the criticism.

But inward-looking jargon brings serious

problems, undermining an organisation's stated aims. The UN claims the Jo'berg Earth Summit will 'reinvigorate at the highest level the global commitment to sustainable development'. This demonstrates that promoting global awareness about the environment and winning popular support are central aims. There's an expressed wish to be 'open, transparent and participatory'. In the UK a worthy, related organisation, UNED, reiterates these aims and is trying to help groups and individuals get involved. But even their language is often baffling, full of references to 'Summit Prep Comms', 'capacity building', and 'stakeholder toolkits for women'. 'Stakeholders' is a typically confusing term, meant to be inclusive but having the opposite effect. Politicians use it to indicate anyone involved in an area but it carries connotations of 'shareholder', excluding those who don't think they have a relationship of ownership to issues.

Such jargon not only shows a failure of effective outward communication. It also infects the other satellite organisations; the charities, the campaign and pressure groups. Most have to adopt this language or be excluded from participation. But it creates tension. RSPB members sometimes grumpily ask why their 'bird' organisation is bogged down in 'non compliance clauses'. Fortunately, unlike the UN, these groups usually provide glossaries to explain the jargon when speaking to members about intergovernmental events.

Acronyms and jargon are not just difficult to understand but are alienating, taking the issues out of the hands of those who are most active in them and most actively affected by them. An organisation like the UN can pass as many 'action programmes' and set as many targets as it likes but if popular consent isn't there, these will fall at the first hurdle. Plus, if the language and processes are obscure, then it is hard to submit them to democratic scrutiny. Alienated from the process, you are also alienated from ways of scrutinising what is happening.

It's telling that the most rigorous checks on implementation have come from non-governmental bodies, like Earth Watch who are outside official languages and processes. Groups like these expose a huge gulf between the words at the conferences and the actions on ground; deforestation, climate change, and habitat loss have all increased since Rio. So if the UN is serious about using Johannesburg to raise global awareness, they should make a fresh start. Those involved have a duty to translate, and talk in ways which don't make fighting for the environment an exclusive pastime.

Ros Coward

How many oil spills?

In late August, about 380 gallons of oil spilled into the Mississippi River, spreading out for about a mile. Although reported by a shipyard worker, no source was located. Similarly, beaches along Santa Cruz had to be closed for several days following an oil spill of supposedly 'unknown origin'. The theory is that the oil might have come from a ship that lost 'several thousand gallons' of oil off Oregon three months ago.

Since then the oil spill season has continued. In early September a cargo ship collided with a Vietnamese oil tanker spilling thousands of tonnes of oil near Ho Chi Minh city. Over in Rio de Janeiro, reports the Environment News Service, a layer of diesel oil is covering parts of Guanabara Bay. The origin of the spill is again 'unknown'. State

environmental authorities say passing ships may have caused the spill.

And in the Persian Gulf, fire on an Iraqi tanker carrying 5,700 tonnes of smuggled crude oil was brought under control, but at the time of writing, officials still fear an oil spill.

Finally, down in South Africa, workers struggled to keep 200 tonnes of oil from spilling from a ship into the sea, although 35 tonnes of diesel had already leaked and by the next day small oil slicks were seen near the ship, raising fears that the hull had cracked. Fittingly, the oil spill occurred just as representatives from 11 African countries gathered in Cape Town to discuss how to improve protection for the African coastline and marine environments ■

BSE – more links in the chain

In 1999, France was advised by the European Commission to lift its ban on imports of British beef. The French

and concerns over infected meat are valid and must be treated seriously; even more so since a member of a

way, around 20 cases a week.

In addition to a grand total of 178,164 cases, scientists now fear that



refused to do so – they felt there were still risks of BSE. Now the situation is likely to get nasty. In late September the advocate general for the EC said that if France objected to the decision to allow exports to resume back in 1999, it should have introduced its own legal challenge at the time. Needless to say, France didn't do so and its agriculture minister still refuses to lift the ban.

Political trade disputes aside, BSE

British government scientific advisory committee has warned that several European countries are likely to see increasing numbers of BSE in cattle.

According to Dr Roy Anderson, the rise in cases in France and Germany 'is very steep', and Spain, Italy and Greece are also seeing an increase. This year, France reported 152 cases and Germany 95, but Britain still tops at least one league table, with 468 cases reported so far; put another

BSE in Britain may have become endemic.

A report in *The Guardian* claimed young cattle may have become infected by pastures contaminated

with excrement of cows carrying the disease. The government reacted by saying that no new controls were necessary and official research into whether soil is contaminated is unlikely to be completed until 2007 – this whilst trying to come to terms with what might happen if any sheep are found to have not Foot and Mouth disease but BSE. Current worst case scenario: 40 million would have to be killed ■

NOTES &

'As we remember the victims of Black Tuesday, let us also strengthen our solidarity with the millions of invisible victims of other forms of terrorism and violence which are threatening the very possibility of our future on this planet. We can turn this tragic brutal historical moment into building cultures of peace.'

Vandana Shiva, *The Hindu*.

'You are dealing with people who are almost child-like as a nation in their understanding of what is going in the world. It's all: "We never did anything to anybody, so why are they doing this to us?"'

Gerald Celente, research director of Trends Research Institute.

'We have to work to maintain the November ministerial meeting. Not because of obstinacy, not because nothing has changed, but for political reasons: because the dialogue and the negotiation between states or regional bodies sharing the benefit of common legal rule is of vital importance. The greater the military and security pressures – and they will be great – the greater the risk that resentment will be strong – and it will be – and the more we have to push for generous market opening of our economies to developing countries.'

EU trade commissioner Pascal Lamy.

'...while one failed ministerial meeting could be regarded as an accident, a second would be a true disaster and perhaps fatal for the WTO's credibility.'

Peter Sutherland, former director general of the WTO.

'China's imminent entry to the WTO, if not accompanied by a much broader acceptance by the membership as a whole, will seem a hollow achievement.'

Peter Sutherland again.

'Endless soothing words about a "development round" have no credibility if the promoters can not demonstrate good faith up front; governments in poor nations can recognise empty political spin.'

...and again.

A reminder of George W Bush's pronouncements prior to 11 September

'Russia is no longer our enemy and therefore we shouldn't be locked into a Cold War mentality that says we keep the peace by blowing each other up. In my attitude, that's old, that's tired, that's stale.' **Des Moines, Iowa, 8 June, 2001**

'Redefining the role of the United States from enablers to keep the peace to enablers to keep the peace from peacekeepers is going to be an assignment. **Interview with the New York Times, 14 Jan, 2001 (Thanks to Rachael Contorer.)**

'Let me put it to you this way, I am not a revengeful person.' **Time magazine 25 Dec, 2000 issue.**

'I am a person who recognises the fallacy of humans.' **The Oprah Winfrey Show, 19 Sept, 2000**

You cannot lead America to a positive tomorrow with revenge on one's mind. Revenge is so incredibly negative.' **Washington Post, 23 March, 2000**

'When I was coming up, it was a dangerous world, and you knew exactly who they were. It was us versus them, and it was clear who they were. Today, we are not so sure who they are, but we know they're there.' **Iowa Western Community College, 21 Jan, 2000**



D'OHBYA!

'I say things because I believe them'

QUOTES

'Famine in developing countries is mainly the result of unfair distribution. Today, the world is producing more food than ever, but there are still more people starving than ever before as well. Producing even more food doesn't automatically mean that the poor will benefit. They simply haven't got the money to buy it. And genetic engineering isn't going to change that.'

Tewelde Egziabher, spokesman for Africa at the Biosafety Protocol negotiations.

'Its [UNDP] work is dependent on money from the industry. The report definitely discredits the UNDP. I often wonder whether it is really still on the developing countries' side.'

Egziabher again.

'IMF bailouts to Argentina carry the misnomer 'aid', but those millions go to the creditors, who otherwise would have to sit down with the Argentine government, hammer out the restructuring of bad loans, and take losses.'

Mary Anastasia O'Grady in the *Wall Street Journal*.

'Free markets foster sustainable development, financially sound development, providing economic and social opportunities for the poor while protecting the environment.'

J Michael Stinson, senior vice president for government affairs, corporate strategy & communications for Conoco Inc.

'There are two worldviews: their worldview is that you subordinate society and nature to the economy. And we say, subordinate the economy to society and nature.'

Kevin Danaher, co-founder of Global Exchange.

The House of Representatives is considering giving President George W Bush 'fast track' authority, despite more than 74,000 textile jobs disappearing in the US in the past 12 months alone – the biggest period of job loss in the industry since demobilisation after WWII.

ENVIRONMENTAL INVESTIGATION AGENCY



The largest cetacean hunt in the world begins this month in Japan, as the Dall's porpoise hunts get under way. Up to 18,000 are killed each year. EIA was the first to document and expose this hunt, and vigorous campaigning led to The International Whaling Commission passing a resolution in July this year calling for 'an immediate end to the slaughter,' following their 'extreme concern' over the status of the stock.

Whale watching

A *Washington Post* article reported on the slow and agonising death of 'Churchill' or 'Right whale 1102', the endangered North Atlantic Right whale that had been struggling off the US coast since it became entangled in a fishing line in early June.

First, 'an overflight spotted the whale 1 September and showed it was emaciated and discoloured.' Then, 'a telemetry buoy attached to the animal went silent 16 September'.

Think about it – the whale took three months to die. Furthermore, 'the appearance of the creature suggested it had a systemic infection'. Added to which whilst most carcasses float, 'scientists believe that this one probably sank because it lost so much weight.'

In all there are now only about 300 Right whales left in the North Atlantic and while collisions with ships (read: ships colliding with whales; the whales can see after all) are the largest single cause of mortality, entanglements in fixed fishing gear have scarred almost 60 percent of these whales. How many more cases like 'Churchill' will it take? ■

Orcas at risk from PCBs

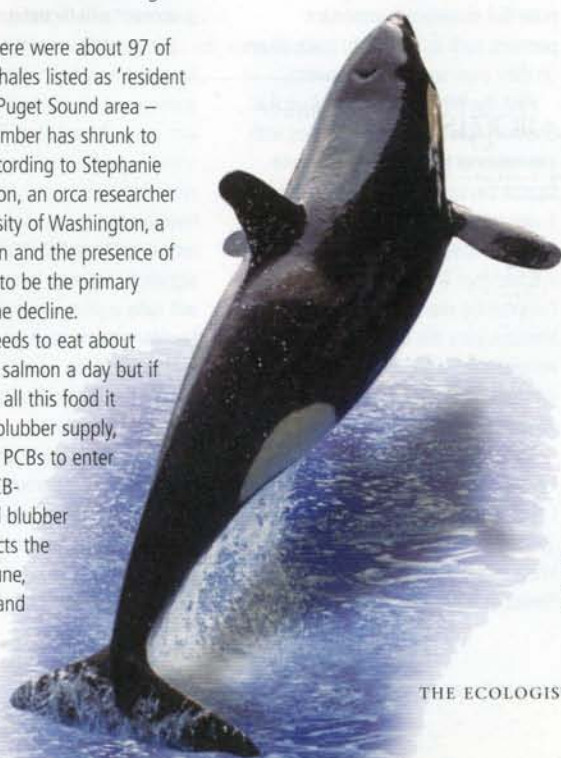
If press coverage is anything to go by, then swimming with orcas is one of those experiences not to miss. But hurry (actually please don't), for according to scientists, the numbers in the Puget Sound, the arm of the Pacific Ocean in North-West Washington connected to the Pacific by the Strait of Juan de Fuca, are declining at such an alarming rate. So fast is the rate, in fact, that by 2003 the 'dominant creature of the oceans' could be listed under the Endangered Species Act.

In 1996 there were about 97 of these killer whales listed as 'resident stock' in the Puget Sound area – today that number has shrunk to about 78. According to Stephanie Hawks-Johnson, an orca researcher at the University of Washington, a lack of salmon and the presence of PCBs appear to be the primary reasons for the decline.

An orca needs to eat about 40–120kg of salmon a day but if it doesn't get all this food it draws on its blubber supply, which causes PCBs to enter its system. PCB-contaminated blubber in return affects the whale's immune, neurological and

reproductive systems.

Puget Sound has over 15 PCB-contaminated sites, and with less salmon available, orcas need to dive deeper to get fish, which are also more likely to contain concentrated PCBs. As this means diving 110m instead of 20m, it requires far more energy. Add it all together and you have the cumulative effect that has probably caused the current decline of the orca ■



BBC WILD

Rewriting the rulebook

In late August, the Pentagon made the first moves towards asking Congress to rewrite the Endangered Species Act so that the secretary of defence could 'grant exemptions for reasons of mission readiness'. Military officials want more flexibility in environmental rules, basically because environmental legislation keeps getting in the way of training exercises. They contend that armed forces are being penalised for being 'good stewards of their land'; that laws to protect nature refuges are obstructing plans to drop live bombs, to fire weapons, manoeuvre tanks and conduct war games.

The Pentagon's move follows a similar request by the US Navy, frustrated that compliance with applicable environmental laws can have 'severe to extreme consequences on operational readiness'.

Barely a month later, over in South Carolina, residents in Charleston complained that the US Army was clear-cutting trees on Polly Island to dump military material. This at the same time as a Congress report was released, saying that the army is making poor progress at cleaning up military sites; falling a mere 50 years short of the set goal. The cost of cleaning up sites by the Army is estimated at \$200 million per year.

Over at Bar Harbour, Maine, environmentalists and lawmakers are trying to stop the deployment of stronger low-frequency sonar that the Navy wants to use to detect 'a new generation of quiet submarines'. Never mind that the sort of sonar the Navy deployed last year off the coast of Bahamas caused more than dozen whales to beach themselves, of which eight died ■

'Tell me what other nation anywhere, faced with such a strategic alliance right on its doorstep, at the crux of international politics, would isolate itself from that alliance, not out of accident but by design?'
Tony Blair's TUC speech (11 September); referring to joining the euro in order to 'combine American economic dynamism with social solidarity, without the inequity of the one or the rigidity of the other.'

'We are a political party that needs to raise money.'
Tony Blair, justifying allowing McDonald's to fund a lunch at the Labour Party conference.

'The government has no pro-nuclear policy.'
DTI spokesman, speaking for minister Brian Wilson.

'Act now to retain the nuclear option... Nuclear energy must continue to play a significant role in the UK's baseload electricity generation... Without nuclear's contribution this country can not have a continued, secure, diverse and environmentally-friendly energy supply.'
Norman Askew, BNFL chief executive.

'There is absolutely no reliable scientific evidence that Paxil is addictive or leads to dependence. ...all of the regulatory bodies are quite happy with the product.'
GlaxoSmithKline spokesman.

'Some of the people are in such bad shape that they can't get off the drug without professional help. Some have been on it for 10 years.'
Skip Murgatroyd, the lawyer representing the 'Paxil victims'.

'...even when an investigator has had substantial input into trial design and data interpretation, the results of the finished trial may be buried rather than published if they are unfavourable to the sponsor's product.'
From the joint editorial of 13 of the world's leading medical journals.

Putting the fizz into physical education

For countless American children and students, breakfast or lunch comes out of a vending machine: hardly the healthiest of sources.

The problem has got so 'big' that several states are now considering turning off school vending machines. In California, state legislators are pushing a bill that would only allow milk, water or juices; in Hawaii they want to throw vending machines out altogether and North Carolina is considering a moratorium on hefty dollar contracts between schools and beverage companies. The reason is simple: American teenagers today are almost three times as likely to be overweight as they were 20 years ago.

The food industry's 'responsible' response goes somewhat along the line that children need more exercise, not fewer choices. And perhaps most surprisingly, the strongest opposition facing legislators is coming from the schools and universities themselves. Then again, maybe it's not so surprising when you consider that some earn up to \$50,000 in

commissions per year for allowing companies to site their machines around the schools and universities.

Even that's small beer to Virginia Tech, which has just 'won' a 10-year exclusive contract with Coca-Cola worth \$17 million. It comes all inclusive – with customised vending machines and a student seconded as a marketing representative.

'I am very pleased that we are able to generate significant monies... to support important university priorities such as recreation and the arts,' said Minnie Ridenour, Virginia Tech's chief operating officer. While the legislators rage about selling children's education down the drain, schools and universities coolly point to state cuts in the educational budget. While the students are becoming heavier and their health is deteriorating, at least their new sedentary lifestyles will be more suited to the brand(ed) new computer centre that the school has now been able to afford ■



When is a freedom fighter a terrorist?

When they are on the other side. The shift in Western policy on Chechnya, suggesting that Moscow should have a freer hand in dealing with separatist insurgents, highlights an ambiguity in the anti-terrorist campaign. Whilst the US is very publicly targeting certain terrorist networks it is able to both turn a blind eye to, say, Northern Ireland (see the *Wall Street Journal* 27/9/01), and express support for potential strategically important partners, such as Russia, to crack down on their own separatist insurgents.

First the White House called on the Chechen rebels to break their ties with international terrorism, notably with Osama bin Laden. Then it denied that it was softening its criticisms about Russia's repression against insurgents in Chechnya. The emerging compromise seems to be that if Moscow joins the US' global anti-terrorist campaign, it will be spared Western pressure over its tactics in the separatist province.

Over in Germany, Chancellor Gerhard Schroeder said that the Chechnyan situation needed to be 'judged in a more subtle way' by the international community. Meanwhile, President Bush said that the war on

terror would end when 'every terrorist group of global reach has been found, stopped and defeated'. The words may be clear, but the definition is not. What does that mean when Bush wants a strong alliance in which some of those potential partners are regularly under their own 'terrorist' attacks or engaged in a civil war? A compromise that encourages just the sort of bad behaviour his global alliance is supposed to be fighting.

For example – sanctions on Sudan have suddenly been lifted, yet its government is engaged in a brutal civil war in southern Sudan. The five former Soviet republics in Central Asia now providing military assistance to the US have among the worst human rights record in the world. China has signalled that even low key assistance will carry a price – namely Tibet. Nuclear experts have warned that easing sanctions on India and Pakistan to help the US sends a dangerous signal for the future.

Just as there is a 'subtle' difference between 'terrorist groups of global reach' and 'freedom loving' separatist movements, so must demands by countries such as China, Russia, etc be judged in a more 'subtle' way ■

GM here to stay?

In late September, the European Commission made its strongest call yet to drop the current moratorium on approving new GM crops. Back in August the Commission proposed extending labelling requirements to cover all foods derived from GMOs and to establish a tracing system from 'farm to fork'. Whilst they need approval of EU governments and the European parliament, a meeting of national experts set for October will discuss the proposals and prepare the ground for the regulatory meeting, where the first new licences in over two years could be granted.

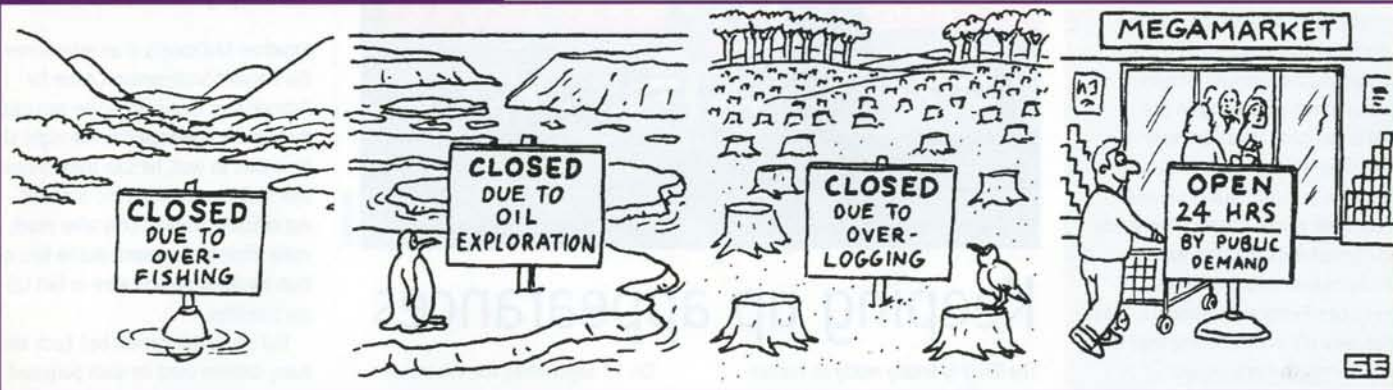
At an 'informal' meeting in late September, health and agriculture commissioners David Byrne and Franz Fischler rallied governments to take a 'pro-active' stance; stating that 'life sciences and biotechnology are in a stage of exponential growth. They open up a vast range of potential in terms of future benefits, competitive advantage, economic growth and employment opportunities' and that Europe must 'explain to the people out there what they risk if we turn our back on this technology'.

Fischler particularly attacked France, Austria, Luxembourg, Italy, Greece and Denmark – which have successfully blocked past attempts to drop the moratorium – hoping that they will change their mind. 'It is not my understanding of political leadership to echo populist stances and play on fears in order to score cheap political points,' Fischler said.

Meanwhile Britain's Food Standards Agency questioned the European Union draft, saying that proposals question 'practicality, affordability and enforceability' and called on the UK government to push for a watered down version. Not wanting to be left out, the Bush administration reacted to the proposals by saying that they are inconsistent with the terms of the WTO because they treat American products less favourably than European ones and could cost US companies \$4 billion a year in losses ■

STAN AT EASE by Stan Eales

CLOSED



Terror and trade

The very bedrock of globalisation has been shaken – so much so that John Gray in the *New Statesman* declared the terrorist acts of 11 September to signify its end. However, maybe the contrary is the case. No doubt the world has changed, but political and economic alliances, led first and foremost by the US, even if uncertain in some details, have never been as strong as they are now.

The terrorist attacks may have evoked some sort of global compassion, but compassion and insecurity lie extremely close; fear being their common denominator. And the West's politicians have been very quick to exploit the 11 September tragedy to further promote global trade negotiations. Indeed EU President Romano Prodi said US-EU solidarity in the wake of terrorist assaults would actually boost the chances for a new global trade round and that 'psychologically there is a strong increase' in Europe's desire to get a deal.

Increasingly faced with the reality of a full-blown global recession, a successful global economy is viewed as being as potent a symbol against terrorism as military action. Calling on Europeans to show their 'economic patriotism' French Prime Minister Lionel Jospin said that 'the fight against terrorism isn't only an affair of judges, the secret service and governments. It also involves business leaders, investors and consumers.'

Globalisation may call for a removal of national borders, but our leaders are happy to employ the language of patriotism when it suits their economic agenda. No doubt the

problem of terrorism is on such a scale as to demand global co-operation and a pooling of resources, but this is not in itself a justification for a free trade agenda.

President Bush said that the terrorist attacks were unsuccessful in destroying the very foundation of civilisation. He was right. Destroying a bank does not wipe its economic records, stored as they are in cyberspace. In a comment in the *Washington Post*, Robert B Zoellick, the 13th US trade representative, reminded readers of just that: 'Today's enemies will learn that America is the economic engine for freedom, opportunity and development... Trade is about more than economic efficiency. It promotes the values at the heart of this protracted struggle.'

Meanwhile, the compromise proposal to give President Bush fast track negotiating authority, recently hammered out by key members of Congress, contains measures discouraging other countries from weakening their labour and environmental standards to attract investment. But 'weakening standards' is not the issue; particularly not now when security stands out above all.

With the United States looking ready to launch new trade negotiations to open markets at the WTO ministerial meeting in November, the real answer remains the same – no form of free trade, whatever the 'standards', will solve the political problems its proponents would so like the world to believe. If the events of 11 September proved anything, they proved that ■

US aid hurts Bolivia

During Prohibition in the US they didn't ban grapes just because you could turn them into wine. But processed coca becomes cocaine, and the coca leaf is to South American countries such as Peru and Bolivia what wine is to us. Both are sacred symbols; both can be abused. Imagine what would happen if a powerful country was to tell the French or Italians to stop producing wine; even sponsor a wine-eradication 'aid' programme that includes military troops searching out and eradicating those vineyards.

A growing peasant revolution is taking place in Bolivia. The Bolivians have no more problem with chewing the coca leaf than we have with drinking wine; the sole difference being that a US-sponsored coca-

eradication programme is in place that is having a devastating effect on the country's economy. In fact Bolivia is struggling with its worst ever economic crisis directly as a result of the destruction of 90 per cent of its coca plantations.

On the one hand, the US-sponsored 'Dignity Plan' of 1997 promised 'zero-coca' by 2002. On the other, *Bolivian Times* has featured regular reports of peasant revolts in La Paz, roadblocks and violent clashes with the military.

The result – with the fields empty, farmers have got nothing to sell or buy. Meanwhile so-called US aid dollars have vanished into thin air, and cocaine consumption in Europe and the US has remained unchanged since 1997 ■

War on Want's photo stunt depicting German Chancellor Gerhard Schroeder and French Prime Minister Lionel Jospin as popular heroes because of their support for the Tobin tax. Gordon Brown looks on in the background – tearful and left behind by his European colleagues because he hasn't shown the same enthusiasm for the idea!



PICTURE NEWS

According to a study by the US Centre of Economic and Policy Research, the number of jobs gained from oil drilling in the Arctic National Wildlife Reserve would be around 46,300, far fewer than the 750,000 many unions claimed it would create. The study also concludes that the earlier study, commissioned by the American Petroleum Institute, was also way off in estimating that the oil from the refuge would represent 3.5 per cent of world production and estimates the true figure at around 1.5 per cent. As a result drilling would push down world oil prices far less than forecasted.

According to the *New York Times*, closing the so-called 'SUV loophole', under which in the US large vehicles such as sport utility vehicles and mini-vans are classified as light trucks and thus escape the 27.5 mile-per-gallon standard required of ordinary cars, would result in oil savings of one million barrels a day by 2015, more than the Arctic National Wildlife Reserve could ever be expected to yield in the same time frame.

According to the UN *Human Development Report*, in 1999 the world's governments spent an estimated £450 billion on the military – a figure that is 14 times greater than the amount said to be needed to eradicate 'absolute' poverty.

'Last year, US companies sold \$15.2 billion worth of weapons, about 44 per cent of the total share of the global arms trade.' Rafael Mariano, Kilusang Magbubukid ng Pilipinas (KMP).

'The price of one British Aerospace Hawk Jet is roughly the amount needed to provide 1.5 million people in the Third World with fresh water for life.' Campaign against the Arms Trade.

According to *Der Spiegel* the world has about 300,000 teenagers fighting as soldiers, 120,000 of which are in Africa and 50,000 in Burma.



REUTERS

Keeping up appearances

The WTO is finally ready to rubber stamp China's 15-year quest to join. Earlier on this year China was also voted to host the 2005 Olympic games, having made loud noises about improving its human rights record, and in the meantime spray-painting the grass green in, of all places, Tiananmen Square, just to show how sincere they really are.

The philosophy amongst the Olympic committee (whose own record on probity is beyond doubt) went somewhat along the lines that the best way to effect such changes in China was to engage the country and grant it the responsibility of hosting the games.

Yet spend just one week looking over the wall and a very different picture emerges. On 12 September the *International Herald Tribune* went into great depth about China's great wave of executions, a campaign in which as many as 191 people have been executed in a single day. Since last April at least 3,000 people have been executed, with twice and perhaps three times as many being sentenced to death.

On 17 September, the *Financial Times* reported that a Chinese lawyer was sentenced to three years in a labour camp for distributing a pro-democracy journal. Yet all he did to merit three years hard labour was simply forward a US-based magazine to 12 other people by email.

Two days later MEP Reinhold Messner expressed grave concern over the fact that China has said it would support the US fight against terrorism if the US in return will support China's suppression of separatism in Tibet, Taiwan and the Xinjiang province. Senior officials in Beijing have begun saying that they plan to crack down on 'terrorists' in Tibet. Meanwhile, a report in the *Wall Street Journal* on 13 September detailed China's ties with the Taliban, which whilst not proven guilty at the time of writing, is to America the very *raison d'être* for building up its anti-terrorist coalition. If democratic states and free trade advocates are willing to allow such oversight, then their frequent claims to be 'civilised' ring hollower than ever ■

UK to increase oil production

To Brian Wilson, UK Minister of State for Industry and Energy, the production of 2.3 million barrels of North Sea oil per day simply isn't enough. After all, there's loads more (315 undeveloped fields), and north-sea oil barons are sitting on some of them (for obvious reasons). Furthermore, there are newcomers such as Tullow Oil, which bought some BP/Amoco fields, sold off for the go-ahead merger with Arco, and as a consequence experienced a six-fold increase in turnover.

At the Offshore Europe oil conference, reports the *Financial Times*, Wilson told oil companies 'to use or surrender unexploited oil fields to new operators'. In a move aimed at 'rejuvenating North Sea production', he said that the 250 fallow and unused licences are 'a luxury we can no longer afford.'

Whilst the government hopes companies will develop or release these assets, Wilson, in a benevolent move, swiftly approved development of a Shell field and waived royalty payments on a 'marginal field' that Canadian Natural Resources Limited proposed to develop.

With the North Sea field about half way through its life, applications for licensing are due to take place at the end of this year – soon after Chancellor Gordon Brown's November Pre-Budget statement, one would imagine ■

US not registering all spy satellites

Jonathan McDowells is an astronomer at the Harvard-Smithsonian Centre for Astrophysics. One night as he was gazing through his telescope into the night sky he knows so well, he saw some things that he knew for a fact did not exist – not officially anyway. Only after much more effort and research did he find out that the flying objects were in fact US spy satellites.

But surely this cannot be? Each and every satellite used for such purposes must be registered with the UN. Officially 43 states – including the US – have signed the UN Convention on the Registration of Objects Launched into outer space. But then again, President Bush has been so busy unsigning treaties since taking office, that maybe this one somehow slipped his mind. Either way, as *Der Spiegel* so aptly put it, 'the world's policeman likes to drive without a number plate'.

McDowells estimates that roughly 100 illegal US satellites are currently cruising the skies; with a minimum of eight specifically used for spying. In an interview prior to the terrorist attacks in the US, McDowells pointed to Bush's space missile defence plans, arguing that with such misinformation it becomes difficult to determine – for any country – if and how many defence systems actually cruise in orbit.

Have a look at the Space Command website, www.spacecom.af.mil for more on US plans for space domination ■

At the Sri Racha Tiger Zoo in Thailand, cubs are taken from their mother prematurely and weaned on sows. In this way, tigresses that would normally have litters of two or three cubs every three years, can have two or three litters a year. Thailand has a thriving trade in tiger products, despite being a signatory to the Convention on International Trade in Endangered Species. EIA investigators found tiger bone pills for sale on the premises of Sri Racha Zoo.

ENVIRONMENTAL INVESTIGATION AGENCY



PICTURE NEWS

A recent ILO report, *Stopping Forced Labour*, stated that an estimated 10,000 to 15,000 Malian children work on plantations in Côte d'Ivoire – many of them victims of human trafficking.

According to the World Tourism Association, 120 million holidays per year are particularly targeted for sex, 360,000 of which from paedophiles.

'We have moved too far into the science of prediction and not enough into how to deal with them in practice. Floods in England, Wales and Scotland, in Mozambique and India are going to become more extreme and more frequent.'
Professor George Fleming, University of Strathclyde.

'Some of the wording legitimises the very abuses the commission wanted to stop.'
John Nobel, director of the British Brands Group on the supermarket code of conduct.

'Asda needs to capture significant slices of market share to meet its profit growth objectives so it will have to return to a more aggressive footing.'
Sally Bain, senior analyst at Verdict on Asda's target of doubling cash profits over the next five years.

'Four supermarkets sell over 75% of all Britain's greengrocery. The purchasing decisions of just 20 buyers, representing the largest food manufacturers and retailers, determine what and how 25,000 farmers farm...'
Charles Secrett, Executive Director, Friends of the Earth.

'I was not at all wishing to speak against the principles of organic farming. We all recognise that intensive farming is damaging to the environment.'
Sir John Krebs, Chair of the Food Standard Agency.

According to the Food Standards Agency, each year 754,000 tonnes of poultry are disposed off in Britain.

Right you are

In an open letter intended to discourage violent demonstrations at EU summits, Guy Verhofstadt, the Belgian PM, accused anti-globalisation protesters of flirting with the extreme right and implied that recent violence was typical of the movement as a whole, rather than the work of a minority of troublemakers. 'A significant fringe within the anti-globalisation movement is flirting dangerously with the extreme right and the populist right, even if it is not aware of the fact. The difference is that [anti-globalisation activists] oppose multinationals because of their alleged prejudice

against the developing world, while the extreme right as incarnated by Le Pen in France demonises the multinationals over the issue of who controls the national economy,' Mr Verhofstadt wrote.

BP pipe down

Following a finance and pressure campaign by pro-Tibetan activists, BP announced in September that it would pull out of a controversial pipeline that would have facilitated the extraction of natural gas from East Turkestan/Xinjiang province (see *Campaigns*, vol 30/5). BP's investment in PetroChina and the West-East pipeline was the subject of a shareholder proposal moved at the company's 2001 annual meeting.



Grave injustices

According to Australia's *Daily Telegraph*, bones from 21,830 dead Australians were removed and used in a nuclear research programme without their relatives' consent. The article, based on the publication of

an Australian Radiation Protection and Nuclear Safety Agency report, reveals that Australia ran its own nuclear research programme similar to the US 'Project Sunshine' (see *Grave Injustices*, vol 31/4). Nearly 5,000 bones came from infants and stillborn babies, and pathologists in major public hospitals were paid to provide samples and initially told to keep their participation 'confidential'. The report also confirms that bones

developed, marketed and distributed GM StarLink corn and participated in fraudulent, deceptive conduct that led to StarLink's use in hundreds of items that people eat. Defendants include Aventis Cropscience USA Holding, Garst Seed Co, Azteca Milling LP, and Gruma Corp., the largest producer and distributor of corn flour and tortillas in the US.

New York's tasteful take on the twin towers tragedy...



of other Australians were sent to the US for 'Project Sunshine'.

Monsanto in the Philippines

In late August, about 800 farmers and members of the public stormed Monsanto's Agroseed site in Maltana village, Mindanao, in the southern Philippines and uprooted all the Bt-Corn plants on the 1,700 square metre experimental field. 'Operation Bunot' lasted only 10 minutes, leaving the two police officers helpless to intercede. Around 100 of the indigenous Lumad population also took part in the protest action, the first of its kind in the Philippines.

Back in 1999, Monsanto, ignoring public opposition and a series of City Council resolutions in Mindanao, pushed through the first open-field experiments of GM crops in the country. Through its subsidiary Agroseed, Monsanto is currently conducting open-field testing of Bt-Corn on around 30 sites in Luzon and Mindanao.

Bell, book and scandal

A class-action lawsuit filed in late September by thousands of Taco Bell restaurants in Washington County Circuit Court alleges that a group of national and international corn and biotechnology firms acted together to cause a collapse of the US corn market, and seeks millions of dollars in compensation and punitive damages. The lawsuit alleges that the defendants

It's no tea party

Whilst high bacteria levels led to the closure of numerous beaches around the Great Lakes, and while a bill

requiring regular water testing is about to be debated, many beaches continue to be closed in the Boston area; this despite testing. The reason is simple: the opening of the world's largest sewage tunnel last September marked the end of a local \$4.1 billion initiative to clean up Boston Harbour. According to the *Boston Globe*, sewage discharges have led to the closure of harbour beaches on about 20 per cent of summer days.

Gun for your money

War on Want is seeking a judicial review of the UK government's 1999 decision to sell gun spares to Morocco, for specific use in the disputed territory of the Western Sahara. In a Joint Select Committee meeting last January, foreign secretary Robin Cook admitted that the spares were destined for specific use in the occupied territory of Western Sahara; a statement further confirmed by a Foreign Office memo.

However, Foreign Office and European Union guidelines advise that neither guns nor spares should be sent to regions where they could be used for internal repression, external aggression, or to stake a territorial claim.

The 25-year conflict between Western Sahara and Morocco has prevented 170,000 Saharawi refugees from returning to their homes and reduced them to living in abject poverty in makeshift refugee camps over the Algerian border.

campaigns

- Iceland's dam shame • Russian pipe dreams • Antipodean anti-logging • UK styrene stink
- Spain's game drain • Mining to do in Peru

ICELAND The danger of hydro

Across the Kárahnúkar plain, glacial rivers surge over waterfalls into echoing canyons, reindeer graze at the foot of Mount Snaefell and thousands of pink-footed geese settle to moult in mud-lined hollows. This is the heart of the Icelandic highlands, just north of Vatnajökull, Europe's largest glacier.

This is also the place where a hydro power project, one of the largest dam projects ever planned in Europe, is set to dam 11 rivers and tributaries to create a 57km reservoir, to produce electricity for energy-intensive industries such as aluminium smelters.

Should it go ahead, the development will flood and destroy a number of beautiful waterfalls and engulf important wildlife habitats. Previously, there had been plans to flood the famous Eyjabakkar delta, the world's largest moulting area for the pink-footed goose. Around 7 per cent of the total population (9,000–13,000 birds) depend on Eyjabakkar, a globally significant number according to the criteria set by the Ramsar Convention on Wetlands. That project was stopped – only to then be replaced by the current much bigger project in the very same area.

GUÐMUNDUR PALL OLAFSSON

The hydroelectric project is in the hands of Landsvirkjun – Iceland's national power company – that provides 90 per cent of the country's electricity and is looking for new ways to expand its business.

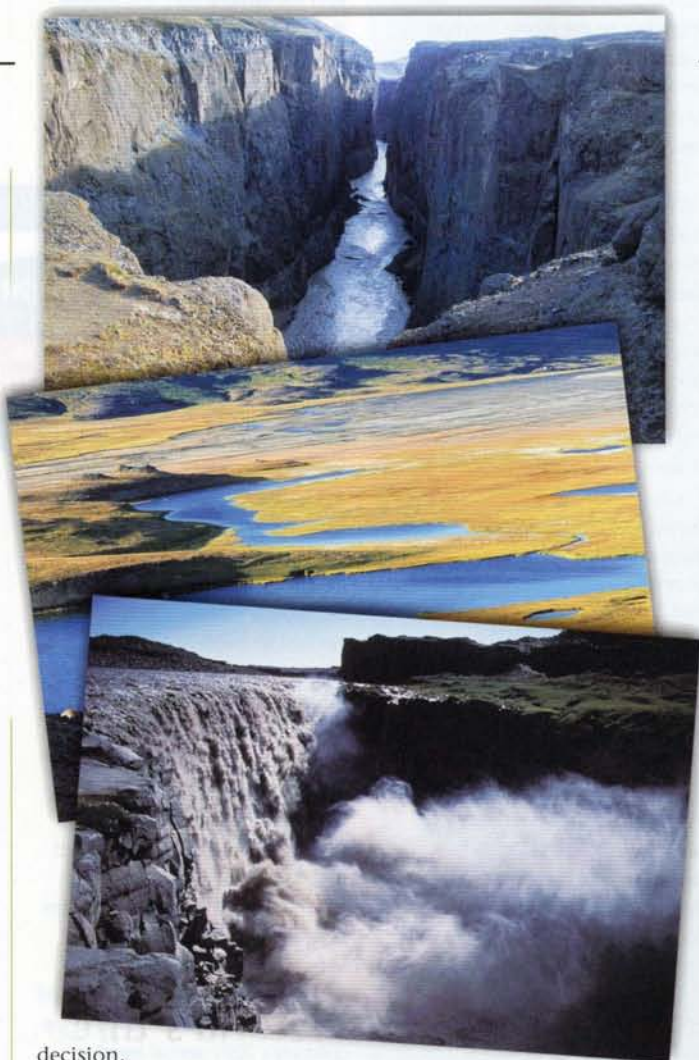
Norsk Hydro, a Norwegian company, is keen to buy up all the electricity generated by the project so that it can power a giant aluminium smelter that it is running.

The project would deliver 750mW for Norsk Hydro's Reydaral aluminium smelter, with an annual output of 420,000 tonnes of aluminium. What's more, since there is no bauxite (aluminium ore) in Iceland, it would have to be shipped all the way from Australia. The so-called Noral Project will be under the joint ownership of Norsk Hydro and Landsvirkjun.

Due to both national and international pressure, Norsk Hydro and Landsvirkjun conducted an Environmental Impact Assessment (EIA), and in August this year, the Icelandic Planning Agency (IPA) issued a very clear ruling against the project.

However, the decision has been heavily attacked by Iceland's Prime Minister,

Foreign Minister and Minister for Industry, who also questioned the integrity of the agency's staff. Most important, though, Landsvirkjun has now appealed against the IPA's



decision.

Whilst it is obvious that both the government and its electric company are keen to develop the region, they cannot go ahead without Norsk Hydro, whose majority stakeholder is the Norwegian Government with 43 per cent of the shares.

In his 2001 New Year statement, Norway's Prime

Minister, Jens Stoltenberg, said that 'the value of unspoiled nature is increasing' and 'the era of large hydro-power developments is over'. In light of these overwhelming facts it is vital to press Norsk Hydro to accept the IPA's ruling and withdraw from the Noral Hydro project.

make a
difference

Write to Mr Eyvind Reiten, Managing Director, Norsk Hydro ASA, 0240-Oslo, Norway; fax: +47 22 53 27 25 or email: corporate@hydro.com. Please copy your letter to David Conlin, Proact, Marathonallee 16, 14052 Berlin, Germany or email proact@david-conlin.de. For more information and a sample letter visit: proaction.tripod.com/Iceland/id8.html.



UK ECGD and contamination of the Black Sea

The Export Credits Guarantee Department (ECGD) exists 'to benefit the UK economy by helping exporters of UK goods and services win business and UK firms to invest overseas, by providing guarantees and reinsurance over loss, taking into account the government's international politics.'

Two years ago Secretary of State for Trade and Industry, Stephen Byers, announced a fundamental review of the ECGD mission and status.

Both the review and subsequent statement of business principles were an important step forward. The department acknowledged that the use of taxpayers' money to underwrite transactions means that it must be more open and transparent in all its dealings. It introduced new criteria for use when considering support, which include the environmental, social and human rights impact. It also committed to press for the establishment of a multilateral framework of common guidelines within the OECD for assessing environmental and social issues.

On the other hand, and in order to facilitate business transactions, the ECGD introduced new finance facilities such as a 'One Stop Shop' – which allows for joint projects amongst Export Credit Agencies; including the 'Good Projects in Difficult Markets' scheme for providing export credit cover for developments in countries where cover is otherwise unavailable or restricted. Needless to say the ECGD's new criteria

apply to all its programmes across all areas of business.

ECGD's first joint project under the 'Good Projects in Difficult Market' scheme was to reinsure parts of a project backed by SACE, its Italian counterpart. The so-called 'Blue Stream' project will see the construction of a 1160km Black Sea pipeline, enabling Russia's Gazprom, the world's largest gas producer, to increase gas supplies to Botas, the Turkish gas utility.

SACE's \$1.13 billion loan to the overall \$3.2 billion project is linked to Eni of Italy. The Blue Stream pipeline company, is a 50/50 joint venture between Gazprom and SNAM SpA; part of Eni. One of the contractors for the offshore section is Saipem SpA, part of the Eni group.

As part of the construction contract, led by Saipem SpA, Saipem UK and Sonsub Limited (part of Sonsub International, which in return is part of the Saipem Group) are providing goods and services worth up to US\$123 million. The UK supply is being financed by a loan arranged by Joint Arrangers, BCI, Mediocredito and WestLB. The

ECGD has agreed to reinsure SACE for the goods and services from Britain.

Over in Russia, however, a different picture is emerging. Under article 11.7 of the federal law of the Russian Federation any such project proposal must undergo an ecological review, yet when the project was initially agreed in 1997 it had not undergone such a review.

The International Socio-Ecological Union, a Russian ecological organisation, charges that the obligatory public hearings procedure had not been held while the 'Blue Stream' project was developed. None of the affected local communities were engaged in the public hearings, nor were the public ecological organisations that were looking into the project, whose findings are extremely worrying.

The pipeline, being constructed by Saipem, crosses Arkhipo-Osipovskoe, a protected reserve forming part of the Russian Federation nature-reserved fund. The official state ecological review, which was ratified only after the agreement was reached, did not consider this fact. This might be linked

to Gazprom being 38 per cent government-owned and in dire need of expanding its operations with the West. Whatever the case, under Russian law any withdrawal of lands belonging to the Russian Federation nature-reserved fund is inadmissible. At the time of writing this unique forest tract of Crimean and Pityisa pine (listed in The Red Data Book of Russia) is thus being illegally logged.

The project includes offshore construction, for which Eni and Saipem are mainly responsible. Part of the pipeline encroaches heavily on two water basins that are part of a sanitary protection zone of the Gelendzhik resort. This is particularly significant as the isolated waters of the Black Sea's ecosystem are already suffering critically from hydrogen sulphide contamination.

The International Socio-Ecological Union is asking Eni and Gazprom to stop the project in its current design. On the other hand, the ECGD must not back projects that run counter to its ambitious guidelines but should rather increasingly consider backing renewable energy projects.

Eni prides itself on operating under strict environmental rules. Tell Vittorio Mincato, Eni's CEO and managing director how these must have been unsuccessfully applied to the 'Blue Stream' project and must be reconsidered. Eni SpA, Piazzale Enrico Mattei 1, 00144 Rome, Italy; Fax: +39 06 59822141. Write a letter to Gazprom's CEO, Alexei Borisovich Miller, 16. Nametkina, 117884 Moscow B-420, Russia; fax +7 095 7198333, say why the current project is running contrary to Russian law and is de facto illegal. Please copy your letters to the International Socio-Ecological Union, PO Box 211, 12 10191 Moscow, Russia; tel/fax: +9 095 1247934, email: soceco@ecoline.ru Write to the Rt Hon Patricia Hewitt, Secretary of State for Trade and Industry, DTI, 1 Victoria Street, London SW1H 0ET, telling her why the ECGD backing of 'Blue Stream' runs contrary to ECGD's business principles and must be re-considered. For more information visit www.ecgd.gov.uk.

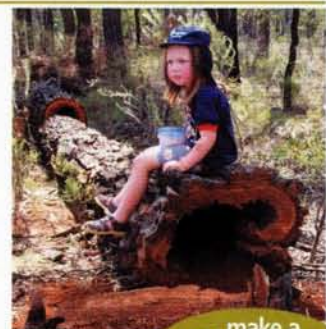
make a difference

AUSTRALIA Protect Victoria's threatened woodlands

New National and State Parks have been recommended in the Box-Ironbark forests of Central Victoria by the government's Environment Conservation Council (ECC). Though the region covers around 3 million hectares of forest, only 17 per cent of Box-Ironbark forests remain on public land – and all of this has been degraded by logging and mining. Unfortunately, the ECC's recommendations for the Box-Ironbark Forests and Woodlands fall well short of a complete protection. Although the ECC proposes three new national parks, these will be inadequate to stop the local and regional extinctions occurring across the Box-Ironbark region. The removal of forest products and gold mining have already taken a

heavy toll on habitat values, in particular the loss of large trees which provide nest hollows for the threatened Squirrel Glider and Barking Owl and prolific nectar for Regent Honeyeaters and Swift Parrots. Consequently, even if all of the ECC's recommendations were to be implemented, they would only protect 6.5 per cent of the original extent of the ecosystem, better than the current 2.4 per cent but still much less than the government promise to protect 15 per cent of each forest type. All the remaining 17 per cent of the Box-Ironbark forest needs protection. The ECC final report has been tabled in the Victorian Parliament but any decision on adoption of the recommended reserves is likely to be some months

away. As there is already some opposition from utilisation organisations, such as the logging and mining industries, it is extremely important that the state government hears loud and clear that people want national parks and want all the Box-Ironbark forests to be protected.



SUSIE DUNCAN, THE WILDERNESS SOCIETY

Write to: The Honourable Steve Bracks, Premier and Minister for Multicultural Affairs, 1 Treasury Place, Melbourne 3002; fax +61 (0)3 96515054; The Honourable John Brumby, Treasurer and Minister for State and Regional Development, Level 4, 1 Treasury Pl, Melbourne 3002; Fax +61(0)3 9651 0759 and The Honorable Denis Naphine, Leader of the Opposition, PO Box 293, Portland 3305; Fax +61 (0)3 9651 8426. Copy your letters to Dr Barry Trill, The Wilderness Society, Ross House, 247 Flinders Lane, Melbourne VIC 3000, fax: +61 (0)3 9639 5466, email: victoria@wilderness.org.au. For more information visit www.wilderness.org.au.

make a difference



The styrene storage tanks at Ex-Press Plastics' Loddon site. Left are the vent stacks which emit styrene into the atmosphere.

UK The stench of plastic

In 1988 Ex-Press Plastics moved from a trading estate in Harleston, Norfolk, to its current site next to a conservation area in Loddon, Norfolk. It made the move following local opposition to the noise and pollution caused by industrial processes.

The community of Loddon, having visited the Harleston site, was appalled at the prospect of having a company with such a poor environmental record in its midst and mounted a vigorous campaign to persuade South Norfolk District Council (SNDC) to refuse planning permission.

Despite their opposition and in full knowledge of Ex-Press's poor record in Harleston, SNDC permitted the move to Loddon on four conditions, the most important of which concerned odour filtration.

A year later none of these conditions had been met. So the residents mounted a campaign to urge SNDC to impose its original conditions. At the same time Ex-Press Plastics continued to make further planning applications to expand its factory.

Of particular concern to the local residents were the

continuous unpleasant-smelling styrene emissions. Styrene, a synthetic chemical, is a known carcinogen and mutagen, used in products such as rubber, plastic, insulation, fibreglass, pipes, car parts, food containers, and carpet backing. The Loddon site has two 18-tonne liquid styrene storage tanks, each about 12 years old. According to a local resident the tanks are refilled weekly. Ex-Press Plastics says the level of styrene emitted is safely dispersed in the atmosphere, is virtually undetectable and is no worse than the odour from a new carpet. However this is contradicted by the physiological effects of styrene inhalation felt by residents.

To highlight their continued concerns the residents produced a 16-page report outlining the difficulties of living so near Ex-Press Plastics. They then sent it to every member of the planning committee. Yet the council continued to ignore their complaints until 1996, when an Oxfordshire company called AEA was called in to find a solution. Instead of recommending stringent styrene emission reductions,

5 dot. campaigners

1 oxfam.org.uk/unclesam
Sign on to this petition to show your concern about World Trade Organisation (WTO) patent rules that put powerful drug companies' profits before public health in poor countries.

2 www.workingforchange.com/activism/

The US Environmental Protection Agency (EPA) is delaying the completion and release of a long-anticipated report on dioxin. Email EPA Administrator Christie Whitman and urge her not to give in to pressure from the chemical industry and to protect public health by releasing the Dioxin Reassessment report.

3 www.progressivesecretary.org

Here is a co-operative, and free, way to get your voice heard in Washington; good letter writing campaigns with sample letters, email addresses etc.

4 www.recyclecongress.org

A great idea that should be applied elsewhere, too. Take action to push the US Congress to adopt a 'Zero Waste' policy for the waste accumulated on Capitol Hill.

5 actionnetwork.org/campaign/NWHI_2

Save the coral reefs and wildlife of the Northwestern Hawaiian Islands.

AEA recommended an increase in chimney height to disperse the styrene emissions!

Since 1996, the local community has consistently requested the help of SNDC. To date the response has been desultory and Ex-Press Plastics continues to blight the community.

make a difference

email: r.carden@btinternet.com.

Copy your letter to John Chapman, The Old Police House, 3 Norton Rd, South Loddon, Norfolk, NR14 6JN, or email info@ex-pressplastics-stink.co.uk. For further information visit www.ex-pressplastics-stink.co.uk.

If you want to help improve the quality of life for the residents of South Loddon by reducing the emissions of styrene from Ex-Press Plastics, please write to the leader of the local council. Write to Mr RAP Carden, Chapel Farm, Denton, Harleston, Norfolk IP20 0AW; fax: 01986 788779,

7 world-wide watchdogs

1 www.hopedance.org
Voices of restraint, intelligence and compassion; a superb online special edition of Hope Dance. With contributions from the Dalai Lama, John Pilger, Susan Sontag, Noam Chomsky, Howard Zinn and many more...

2 globalresearch.ca

The Centre for Research on Globalisation is an independent research and media group of progressive writers, scholars and activists committed to curbing the tide of 'globalisation' and 'disarming' the New World Order.

3 www.pesticidesplanes.com

Flying is dangerous – and for more reasons than you might first think.

4 www.sunshineproject.org

Look out for 'Bioterrorism Begins with US Reforms' by Edward Hammond – a paper that had to be written and – brilliantly so – now has been.

5 www.schnews.org.uk/archive/news321.htm

Have a read of the extraordinary lengths governments go through in order to protect and promote military-industrial interests.

6 geowww.uibk.ac.at/research/cblanca/

Read on Cordillera Blanca's melting glaciers and climate research.

7 www.fooeurope.org/publications/Final_GMO_Contaminati-on

According to Friends of the Earth Europe, contamination of crops and foods worldwide by genes escaping from the specific crops into which they were engineered through genetic modification is now 'the big problem'. The world must move as quickly as possible to agree a liability mechanism under the UN Cartagena biosafety protocol.

Please send your campaign websites to Stephanie Roth at: The Ecologist, Unit 18, Chelsea Wharf, 15 Lots Road, London SW10 0QJ, UK.
Tel: +44 (0)20 7351 3578.
Fax: +44 (0)20 7351 3617.
Email: campaigns@theecologist.org

SPAIN Draining the Rio Grande to water Malaga

Guaro is a small village 24km north of Malaga. Situated east of Sierra de las Nieves in mountainous countryside, its fertile plains are of great agricultural importance. Famous for its almonds, Guaro also boasts olive, citrus and avocado trees, all watered by the nearby Rio Grande.

All this is set to change. Malaga's ever growing tourist industry and golf courses need more and more water. While Madrid and Bilbao need an average 280 litres of water per inhabitant per day, Malaga's per capita consumption is 480 litres per day. Currently there are about 40 golf courses on the Costa del Sol, with 12 more coming. With each square metre using up about 7 litres of water per day, an average sized course needs a lot to drink.

To accommodate these needs Acusur, the region's main water utility, has been given permission to dam the Rio Grande. The so-called Presa Cerro Blanco will be 45m high, 720m long and flood a minimum 240 hectares as well as a section of the main road

connecting nearby villages.

Although Acusur's impact assessment says the damage will be minimal, the people of Guaro disagree. They argue that the area flooded is some of the region's richest agricultural land and that the number of people directly affected will be well over 1,000.

Furthermore, over 400 local families who earn their living from agriculture will lose their way of life. Some will have their houses and farms flooded, while those living below the dam will lose their wells and irrigation channels. To these people no alternative could ever replace their way of life. In social and economic terms, the damage from the dam is thus incalculable.

Also incalculable, says local protest group Plataforma, will be the environmental damage – the Rio Grande region will

lose much of its wildlife.

Indigenous species of flora and fauna growing along the river will disappear, as will the fish and many of the animals dependent on this ecosystem. Gone too will be the eagles, vultures, goshawks, buzzards and golden orioles.

Plataforma argues that the dam would also adversely affect villages beyond Guaro, none of whom have been adequately informed about the now imminent construction. Finally, as only around 40 per cent of water reaches the other end of the pipe, the dam would be unnecessary if leaks were mended and systems improved. Why

should the Rio Grande and all the life around it be made to pay for Malaga's unsustainable thirst?



CHRIS GREGORY



make a difference

Write a letter to Jose Antonio Vellegas-Ales, Presidente, Acusur SA; Amador de los Rios, 27, 29018 Malaga, Spain; fax: +34 952 206 817. Remind him of the project's true cost. Tell him the dam is not a sustainable solution for Malaga and that his company should instead invest in technologies that minimise the water loss. For more information on the devastating effects of dams in Spain and alternatives, visit www.ecologistasenaccion.org. Copy your letter to: Plataforma, c/o Miguel Angel, 29108 Guaro, Malaga, Spain or email: apcerroblanco@navegalia.com.

PERU Mercury poisoning from mining

In less than 10 years, a rural agricultural and dairy-producing region in northern Peru has been overwhelmed by a multinational mining operation, whose four open-pit gold mines are the most profitable in all of South America.

Spread across 25,000 hectares of mountaintops, the Yanacocha mine, one of the world's largest, looks set to keep growing. Its joint-venture company owns mineral rights to an additional 125,000 hectares, including Mount Quilish, the main source of water for the city of Cajamarca.

At the mine sites, huge piles of low-grade ore are soaked in a toxic cyanide solution that leeches out the gold and silver. Although Yanacocha managers claim cyanide and other toxic metals cannot escape the mine site into the watershed, mining expert Dr Robert Moran says, 'all the sites I have ever worked at experience some degree of leakage'. Mine contamination has already resulted in three major fish kills in nearby rivers and trout farms.

'There is general agreement that the current situation in Cajamarca is unsustainable from a social, economic,

and environmental perspective,' states the report of an expert mission sent to the region by the Ombudsman's Office of the International Finance Corporation (IFC), the private lending arm of the World Bank. The expert team visited Cajamarca in response to two formal complaints filed by Cajamarca citizen groups.

The first complaint demands an investigation into mercury poisoning that affected around 300 villagers in June 2000. The mercury leaked from a Yanacocha Mine truck, contaminating a 40km section of highway, including three villages. The second complaint demands company accountability for many negative social, economic, health and environmental impacts on the community. Demands include higher prices for land purchases, public access to monitoring of water and air quality, ecosystem preservation, health services, and citizen participation in all these activities. Number one among these demands is no further expansion.

Saving Mount Quilish is the greatest concern for the city of Cajamarca. Its 130,000 residents and many more from the surrounding areas depend on water from Mount Quilish for drinking and agriculture. The

Yanacocha Mine already owns almost all of Mount Quilish and refuses to relinquish its right to mine the mountain. The IFC, which owns 5 per cent of shares in the Yanacocha Mine and provides additional loans, also refuses to declare Mount Quilish off limits; it only says that Peruvian and IFC standards for environmental impact studies and public consultation will be applied. For Cajamarca citizens this is insufficient assurance.

make a difference

Send letters to the IFC and Newmont Mining Corporation, urging them to declare Mount Quilish off limits for mining, and to establish policies requiring the participation and consent of affected communities to: Wayne Murdy, CEO, Newmont Mining Corporation, 1700 Lincoln Street, Denver, CO 80203 USA, fax: +1 303 837 6100. Peter Woicke, Executive Vice President, IFC, 2121 Pennsylvania Ave, NW, Washington, DC 20433 USA, fax: +1 202 974-4359. For more information see www.globalresponse.org.

Is FTSE4Good just stock market

CRAIG MACKENZIE AND ROB CARTRIDGE DEBATE THE CREDENTIALS

Dear Rob

In July, FTSE, the stock market index company, introduced a new company index called 'FTSE4Good'. To qualify for the FTSE100 a company just needs to be worth a lot on the stock market; to qualify for FTSE4Good a company needs to pass a number of environmental, social, and ethical criteria. FTSE4Good contains unsurprising companies like Vestas – the world's largest wind power company – but it also contains quite a number of companies that have raised eyebrows, like BP and Shell.

The inclusion of such companies has led some people to suggest that FTSE4Good is just stock market capitalism dressed up as social responsibility.

'FTSE4Good is one of the most promising attempts to transform capitalism that has emerged in the UK in recent years.'

I believe that this view is wrong. However, I don't pretend that FTSE4Good isn't stock market capitalism. Of course it is. The question is whether or not FTSE4Good is taking a socially responsible position regarding stock market capitalism.

I am also not arguing that stock market capitalism is in some overall sense 'socially responsible'. Where capitalism has worked it has led to undeniable benefits to human welfare. But its rewards have been shared extremely unequally and have come at a huge cost in human, cultural and environmental terms. Despite its benefits, capitalism is a flawed system. Thus, the question is: what to do about it? What is the socially responsible reaction to its flaws?

One response is rejectionism: pages of *The Ecologist* have been graced by some of capitalism's most thoughtful rejectionists. The streets of Genoa and Seattle have been scarred by a rather more aggressive and confused rejectionism. Standing in opposition to a flawed system can be the epitome of social responsibility. But it is not the only form of reaction; an alternative is reform. Capitalism could become a much less damaging and more socially responsible system. I believe that FTSE4Good is one of the most promising attempts to transform capitalism that has emerged in the UK in recent years. How does FTSE4Good contribute to this transformation? It does so by providing companies with clear guidance about good practice on corporate social responsibility, together with an immediate and persuasive reason to comply.

Let me explain. There exists a large number of authoritative standards for good business practice, drawn from sources such as the Universal Declaration of

Human Rights, the International Labour Organisation conventions, and Rio Agenda 21, and embodied in documents such as the OECD Guidelines for Multinational Enterprises and the CERES principles. FTSE4Good does not seek to develop its own standards but to embody these authoritative emerging standards in its selection criteria.

All too many companies still fail to fully achieve these global standards. With the help of the Ethical Investment Research Service (EIRIS), FTSE4Good will research compliance with elements of these standards by 2,000 companies around the world. It will then publish a list of companies that satisfy the FTSE4Good criteria and are eligible for inclusion in the FTSE4Good indices. This brings considerably increased transparency to the corporate social responsibility performance of the world's 2,000 biggest companies. This will help to raise the profile of corporate responsibility standards and will, I believe, provoke debate in the corporate sector.

I expect this transparency will have even more direct consequences. The FTSE has strong reputation in the financial community and enjoys a high profile amongst the public. Companies therefore want to be included in the index, and many already appear to be working hard to ensure inclusion in future versions of the index.

Obviously, all well managed companies say that they want to comply with the best global standards of corporate responsibility, but it is amazing how many find reasons to put off doing the hard work required. FTSE4Good provides a compelling new reason for companies to act now!

In order to be demanding but achievable by the majority of companies, FTSE4Good has deliberately set thresholds somewhat below the highest standards being achieved by global companies. One consequence is that many companies listed in the index are not squeaky clean; indeed many face major environmental and ethical challenges. This is perhaps the main reason why people doubt that FTSE4Good is really socially responsible. But this misses the point: FTSE4Good is not designed to contain only squeaky clean companies, it's function is to encourage progress towards greater corporate social responsibility in the business world. It will not do so if it is only for the companies that are already paragons of moral virtue.

As time goes on FTSE plans to raise the standard for inclusion progressively year by year, encouraging steady improvement in business. FTSE acknowledges that in some areas its current criteria are fairly rudimentary. It hopes to work with experts, both in business and civil society to help to define more demanding standards for business which it will apply in the future.

I hope and believe that FTSE4Good will become a strong force for progress towards a more sustainable and less damaging form of capitalism. If it succeeds it will richly deserve its claim to social responsibility.

Craig Mackenzie



Craig Mackenzie is the director of Governance and Socially Responsible Investment at Friends Ivory & Sime and is deputy chair of the FTSE4Good advisory committee. He can be contacted at: craig.mackenzie@friendsis.com.

capitalism dressed in green?

OF THE NEW STOCK INDEX THAT BOASTS ENVIRONMENTAL STANDARDS



Rob Cartridge is campaigns director of War on Want, in conjunction with Traidcraft Exchange, War on Want founded the Just Pensions Project. For more information visit: www.justpensions.org.

Dear Craig

Thank you for thoughtfully setting out FTSE4Good's aims. It was good of you to acknowledge straight away that FTSE4Good is stock market capitalism. The temptation is to agree and help *The Ecologist* save a few pages and trees. But it's more interesting to open out the debate to the key issue at stake, namely what the role of social responsibility is in reforming capitalism, and to what extent FTSE4Good helps.

Like you, I am happy to begin by outlining points upon which we can agree:

Yes, I think FTSE4Good is a welcome move in principle because it helps expand and entrench debate about social and environmental responsibility in the financial mainstream. I also accept that, given its intended audience, FTSE4Good has to progress cautiously in the criteria it adopts and promotes. And of course the index's use of an independent charity EIRIS to monitor companies and your commitment to raise money for UNICEF are laudable.

So why do I think FTSE4Good is nothing more than traditional stock market capitalism dressed up to look socially responsible? Well, let's start by reminding ourselves what the problem with capitalism is in the first place. Ken Livingstone told Lynn Barber in 1989 that 'our way of life is built on the slaughter of 15 million people in the third world every year.' He added that 'Hitler's war cost 30 million lives over six years, but the IMF, World Bank and the Western banking system do that every two years. Our financial institutions have become the greatest instruments for the slaughter of humans ever devised.'

Now, we could quibble over his figures and deplore the gratuitous reference to Hitler, but enmeshed in this throwaway paragraph is the seed of anger felt by protestors at Seattle and Genoa. In our consumerist globalised society the abundance of wealth in one third of the world highlights the plight of the poor in the other two thirds. Billions are left in dire poverty at the mercy of the markets. Industrialisation has also made our footprint on the biosphere perilously large and unsustainable. And, as ever, it is the poor who suffer most of the consequences of environmental degradation.

Clare Short and others argue that globalisation will deliver the poor from poverty. This puts an enormous responsibility on multinational corporations and international investors – a responsibility that I am not sure they should be given, or are capable of dealing with. This is where FTSE4Good should come in. By increasing the profile of social responsibility in the City, there should be a positive knock-on effect in the business community. But does this happen? The weight of evidence so far shows that it doesn't. Ethical funds have been established in the UK for nearly 20 years now – and most of them successfully manage more

stringent criteria than FTSE4Good, which doesn't even have a systematic corporate engagement programme of the type being promised by many leading ethical funds, including your own.

By running with screening criteria (ie some companies pass, some companies fail) FTSE4Good will be of little use to the mainstream pension funds. They are not yet prepared to contemplate screening out high-earning blue chip companies that pay large dividends just because they abuse workers' rights in the developing world.

Using screening is only useful when marketing products to the vocal middle classes. By offering them an opt-out of a nice clean pension fund and other investments there is the danger that you open the

'By offering a diluted version of ethical investment, all FTSE4Good is doing is filling a niche in a competitive marketplace and helping a few large companies and investors feel slightly better about themselves.'

gates for every other mainstream occupational fund to make as much money as it can from tobacco, arms, or whatever it wants. If we do not get to these mainstream funds we cannot reform capitalism.

Far more use in the long term would be an initiative from the FTSE that worked with individual corporate members, monitored their progress against all international standards, and published the results. Companies could be forced by FTSE (or government) to publish more information in annual reports, and fund managers taught to look beyond their balance sheets at social and environmental policies and the associated risks. That really could change the face of capitalism.

By offering a diluted version of ethical investment, all FTSE4Good is doing is filling a niche in a competitive marketplace and helping a few large companies and investors feel slightly better about themselves – and then only because they pass the majority of the criteria. You can get on to the approved list even if you are a gross violator of one or more of the standards that FTSE is measured against.

Of course, FTSE4Good can still be improved, but until then, it is like Vera Lynn singing *We'll meet again* – a welcome morale booster, no doubt, but at the end of the day, a distraction from the real fight.

Rob Cartridge

Dear Rob

Your main criticism seems to be something like this: FTSE4Good is just watered down ethical investment and history shows that ethical investment has little or no impact on changing corporate practice, therefore FTSE4Good is going to be ineffectual and so isn't really socially responsible.

Echoing the positive tone you adopted in your letter, I can only agree with you that the traditional model ethical investment (where 'bad' companies are excluded from investment) is not a very powerful tool for encouraging corporate change. The main reason why not is that by and large companies don't care very much if they are not included in an ethical fund. Ethical investment is still small and low-profile. There is no publicity when a company is excluded from an ethical fund, and it won't affect the share price, so who cares?

But this exactly why it is wrong to apply your argument to FTSE4Good; why companies do care if they are not included in FTSE4Good, they care very much. And over time I believe that they will care more and more.

Why? Because FTSE4Good is much, much more than ethical investment. FTSE4Good is a stock market index provided by FTSE, one of the world's most respected index providers. Certainly there will be ethical investment funds based on FTSE4Good, but indexes are much more important than just providing the basis for index tracker funds. Indexes produced by reputable index companies like FTSE have an objective and public status. Being in the main FTSE 100 index or the Dow Jones Industrial Average is a sign of corporate stature and prestige. It has a significance well beyond the financial benefits of being in an investment fund.

When companies are excluded from ethical funds they don't much mind, when they are excluded from FTSE4Good they mind very much; and will work hard to ensure that they are included in future. As long as FTSE4Good can demonstrate that selection for the index is based on an objective, robust and credible model of corporate social responsibility, they will continue to want to work to be included. As I indicated in my previous letter, this is why I think FTSE4Good can claim to be socially responsible. (Incidentally, I think FTSE's biggest challenge is to ensure that FTSE4Good can claim to objective, robust and credible, and it is working hard to do just that.)

As it happens, I don't think you should be too ready to write off ethical investment. More and more ethical investors are turning to the idea of 'engagement' as an alternative strategy to 'screening' out controversial companies. As you indicated, my firm is committed to using its influence as a major shareholder to encourage companies to improve their ethical and environmental performance. Engagement can be remarkably successful in achieving change. In the last year or two my company alone has contributed to significant changes in more than a dozen companies. And we are not alone, in the US investor engagement has a steady track record of corporate change.

'But FTSE4Good doesn't do engagement', I hear you say. Quite right. FTSE4Good is an index, not a shareholder. Shareholders are owners of companies and have a clear responsibility and legitimacy to hold companies accountable for their performance. Indexes aren't and don't. But, and this is a very important 'but', FTSE4Good will make it easier for shareholders everywhere to fulfil this responsibility. For

almost the first time, FTSE has provided them with a ready (if currently rather crude) global yardstick to evaluate corporate commitment to social responsibility. When a company they invest in is excluded from the FTSE4Good index, shareholders will want to ask why. They may be concerned that the company is perhaps not taking its social responsibilities seriously enough, and if so I would expect them to act accordingly.

FTSE4Good is not a diluted version of screened ethical investment. You were right when you said FTSE4Good 'helps to expand and entrench debate about social and environmental responsibility in the financial mainstream'. Exactly so, but it will go one better: by providing a very public yardstick that reflects good practice in corporate responsibility, FTSE4Good will contribute directly to corporate change.

Craig Mackenzie

Dear Craig

I wholeheartedly agree that an engagement approach is far preferable to a screening approach, and can cause real change (see for example War on Want's involvement in the Just Pensions Initiative).

I suppose my point of departure from your latest argument comes when you say confidently: 'When a company they invest in is excluded from the FTSE4Good index, shareholders will want to ask why?' Will they? You have perhaps more faith in institutional finance than I do.

When FTSE4Good was launched at the end of July, many headlines were generated about the exclusion of Tesco, Safeways and the Royal Bank of Scotland. If your analysis is correct you might have expected the floor to fall out from under their share price at that time. But in fact they suffered hardly a blip. Indeed within a week of the launch of the FTSE4Good both Tesco and Safeways had recovered any loss that might have been put down to the bad publicity.

This sends the wrong message to corporations. For FTSE4Good to work, pension fund managers, and other investment chiefs in the mainstream City institutions, must believe that the causes of exclusion represent a risk to the company's value. They must believe it will affect the bottom line. If they don't believe there is any risk, they won't sell shares and the company will have no incentive to improve its record.

The problem is the extreme short-term perspective on which most investors take their decisions. They are not interested in, or able to act on, long-term risk. For example the fact that oil extraction is entirely unsustainable has very little impact on the price of shares of oil companies. The fact that garment workers in Bangladesh, forced to work in conditions akin to slavery, may eventually rise up and create global economic chaos, is not the concern of those who invest in our High Street clothing retailers who can barely see beyond Christmas.

'When companies are excluded from FTSE4Good they mind very much... As long as FTSE4Good can demonstrate that selection for the index is based on an objective, robust and credible model of corporate social responsibility, they will continue to want to work to be included.'

Craig Mackenzie

Whilst the negative publicity caused by Tesco's exclusion will have caused headaches in the PR department, if the stock price isn't affected will it really lead to changes in the boardroom?

What perhaps undermines FTSE4Good even more, is that within two months of the outset it is already rethinking its list and adding a whole load of new corporate giants. Tesco, following heavy lobbying, has now been admitted. I would be very interested to know what they have done in the space of two months to suddenly change from being a non-responsible company to becoming a responsible one. Especially given that the period included their record fine for trolley dumping in Chelmsford.

But, I hear you cry, if it is meaningless to fund managers, why did FTSE bother with the new index at all?

We're back to the PR question again. As we have seen from the demonstrations in Davos, Seattle and the City, capitalism is facing a legitimacy crisis. With social democratic governments in the majority in the European Union times are changing. Even our own government, who sometimes seems joined at the hip with big business, is instituting a company law review and bringing about other legislative changes which may force companies to act in a more socially responsible way. If enough companies volunteer to jump through a few hoops then maybe the social pressure will reduce sufficiently and the legislation will be quietly dropped.

Call me an old cynic, but it seems to me that FTSE4Good is about doing just enough to keep the politicians at bay, without really making any significant changes to how the markets work. In this way FTSE4Good is not just dressing up as market capitalism, it is contributing to its preservation.

Rob Cartridge

Dear Rob

You see Tesco's promotion to the FTSE4Good index in September as a sign of the index's weakness. Far from it! This is excellent example of FTSE4Good's ability to

contribute to change. Here's why: Tesco was excluded from the original FTSE4Good index because of its weak environmental reporting; Tesco is now included in the FTSE4Good index because it has published a much more detailed account of its environmental policy and management systems (available at: www.tesco.com/everylittlehelps), including specific targets on a number of environmental issues – energy use, recycling, climate change etc. This is a significant step in the right direction by a very large company. These voluntary disclosures will help

stakeholders to judge for themselves whether the company is fulfilling its environmental responsibilities – or to challenge the targets if they don't think they are good enough.

So Tesco has now joined the FTSE4Good index, not

because of the 'heavy lobbying' you suggested, but because it has made substantial and worthwhile improvements in its environmental disclosure. While FTSE4Good is certainly not the only reason why Tesco has moved forward, I am confident it is one important factor. If I am right, this is an excellent example of how the greater visibility FTSE4Good can offer contributes to change.

This is one modest step by just one company, but it is the kind of change that I expect FTSE4Good to contribute to for dozens of companies each year, every year, as it continues to raise the standards demanded for inclusion. This unrelenting, incremental progress could be exceptionally powerful, given the vast scale and global reach of the companies involved.

But I am afraid that this will not satisfy you, because incremental progress is a 'bad thing' in your book because it weakens the political pressure for regulatory change to 'force companies to act in a more socially responsible way'. I don't think you are right about this: the pressure for global regulation is far too strong to be diverted by voluntary initiatives like FTSE4Good. I am optimistic that we will begin to develop the institutional and regulatory mechanisms to drive global capitalism in a more sustainable direction, but the problems we all face are far too serious to simply wait for this to happen. It is imperative that companies are encouraged by investors, trades unions, customers and by socially responsible initiatives like FTSE4Good to move forward today!

Craig Mackenzie

Dear Craig

I think you miss my main point on Tesco. The reason they have made efforts to publish an environmental report (which I agree is a very welcome step), is because of the bad publicity and PR associated with having been left out of the FTSE4Good index. There is no evidence that fund managers changed any investments as a result of FTSE4Good. The share price did not alter and the company's value was not affected.

That PR associated with FTSE4Good brings about changes is definitely positive. But it is not sustainable. Unless fund managers in mainstream pension funds begin to respond to the criteria which FTSE4Good and others are highlighting, market capitalism will not visibly change. At best it sets up FTSE4Good as just another NGO, and don't we have enough of them already? (Separate debate needed here please *Ecologist!*).

Incremental progress, today, brought about through whatever methods are open to us, is of course welcome and vital. I agree that we cannot wait for regulation, I am just suspicious when the people most closely associated with the status quo start talking of voluntary agreements, codes of conduct etc. I hope that your analysis, that legislative progress on these fronts is on the horizon, proves to be correct.

But let us return to the original question: 'Is FTSE4Good traditional stock market capitalism dressed up in green?' I think you got the rough end of the deal on this debate. Born out of the very heart of capitalism it is inevitable that the index is more symbolic than practical. That FTSE has identified a need is extremely positive. That the index will inspire some small, gradual changes in some corporations is also welcome. But let us not kid ourselves that FTSE4Good will in any way significantly challenge the main thrust of profit-driven market capitalism. Only legislators will be able to properly tame that particular lion!

Rob Cartridge

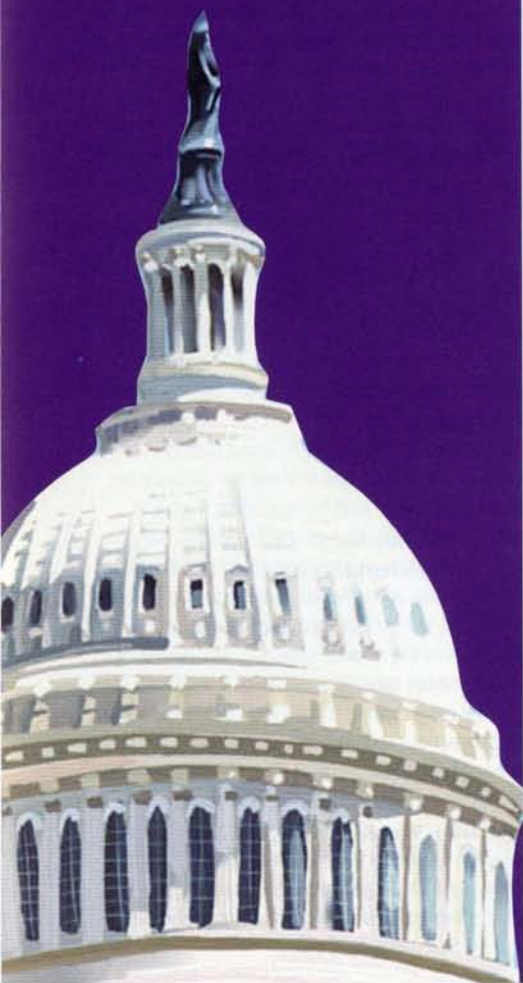
'FTSE4Good is about doing just enough to keep the politicians at bay, without really making any significant changes to how the markets work. In this way FTSE4Good is not just dressing up as market capitalism, it is contributing to its preservation'

Rob Cartridge

profile

ILLUSTRATIONS BY CHRIS BLYTHE

Barbara Lee was the only member of the US Congress to vote against allowing Bush the power to do as he pleased against Afghanistan. Frontiers of Freedom are relentless anti-environmentalists and promoters of the free market agenda.



In a radio address on 6 October, President Bush declared: 'The United States is presenting a clear choice to every nation: stand with the civilised world, or stand with the terrorists.' The options were stark. You either bought into his particular brand of America, or you supported the murder of 6,000 people.

Such polarisation is immensely dangerous. Aside from highlighting the narrow perspective of Bush's vision, from where there really are only two choices, it has also, for much of the outside world at least, condensed all of America's 250 million inhabitants into one shared persona. Over the past few weeks, certain ignorant individuals and headline hungry sections of the media have occasionally found it all too easy to use 'Islamic' as a lazy and perniciously inaccurate shorthand for this one very small and volatile offshoot of a vast and diverse religion. Likewise, by presenting his America as the only America, Bush has served to exacerbate the sort of hatred towards his country that one witnesses all over the world.

But this cannot be the real America, any more than Bin Laden is the real Islam. The majority of Americans, after all, did not actually vote for President Bush in the first place. Nor do the bellicose views that have saturated our TV screens and newspapers for the past weeks represent the values held quietly by the majority, but rather the bloody prejudices shouted from the barricades by a vociferous and over-influential few. The two profiles that follow are not supposed to represent the only two sides to America, but rather to remind us that there is more than one.

Democrat Congresswoman **Barbara Lee** was born in El Paso, in Bush's own state of Texas, the daughter of a colonel in the US army. The self-styled 'army brat' was elected to Congress in 1998 with 62 per cent of the vote, and re-elected a year later with 82 per cent. Throughout her career she has made a point of embodying the spirit of America, namely the right to speak as one sees fit, and stand up for what one believes is just.

Her conviction was clear from the beginning of Bush's presidency, when she gave voice to the crumpled and worthless votes of many millions by boycotting his inauguration. 'I cannot in good conscience celebrate the inauguration of George W Bush when in Florida thousands of Americans were harassed, turned away, or

otherwise disenfranchised,' she explained.

She has called to drop sanctions on Cuba, demanded cheap AIDS drugs for the poor and spoken out against China's bids to join the WTO and hold the Olympics when it 'persecutes, jails and tortures its own citizens.' She called the Chinese government's campaign to wipe out the Falun Gong 'a campaign against freedom of thought, freedom of expression and freedom of belief.' She was one of only five members of congress to vote against a resolution supporting the 1998 bombing of Iraq, and the only member to vote against the 1999 resolution regarding the use of military force in Kosovo.

Last month, she stood alone once again as the only person in Congress to vote against granting Bush the power to use 'all necessary and appropriate force' against anyone associated with the attack on the World Trade Centre. Her reasoning was that: 'Some of us must say, let's step back for a moment and think through the implications of our action today so that it does not spiral out of control... as a member of the clergy so eloquently said: "As we act, let us not become the evil that we deplore".' The result was that she received death threats, was labelled a communist, and had to be protected by a 24-hour plain-clothes police guard. Yet all she did was uphold her right to free speech, and demand that Congress fulfil its constitutional responsibility, namely to debate the issues facing the country.

Frontiers of Freedom are likewise outspoken. The *Washington Post* has called them 'the antithesis of the environment movement', and their head, Malcolm Wallop, is a retired senator and rancher from Big Horn, Wyoming, who has referred to himself as 'the biggest redneck in town'.

Their website declares them to be 'a non-profit and non-partisan educational and research organisation dedicated to protecting constitutional rights and restoring constitutional limits on government'. However, this 'non-profit and non-partisan' organisation told those gathered at the annual World Fuels Conference in 1998: 'Support us and other conservative and free market and grassroots groups on your side. We can make the case against Kyoto without being tarred by charges of putting profits ahead of the public interest.'

As regards education, earlier on this year

it launched a potentially precedent-setting lawsuit against the Rainforest Action Network, claiming that it was violating federal law by using tax-deductible donations to fund its advocacy campaigns. It should be noted that Frontiers' biggest contributors include Philip Morris, ExxonMobil and RJ Reynolds Tobacco. Furthermore, in response to the attacks of 11 September, Frontiers of Freedom has set up its own 'public education initiative', ACT (Attack and Crush Terrorists). Through this initiative, along with FIT (Fully Intact and Trained) and AIM (Annihilate Incoming Missiles), Frontiers intends to 'help build and maintain America's support for the military, a national missile defence system and an end to terrorism'.

And, as for research, the 'Historical Documents' archive on its website displays the full breadth of the organisation's thinking. It contains an exhaustive list of one item – *The American Constitution*.

Relying therefore on Frontiers' own archives for endorsement, we are invoking the mainstay of the constitution, the Fifth Amendment, and making no more comment. Instead we are employing the other great pillar, namely the right to free speech, and allowing both Barbara Lee and Frontiers of Freedom the chance to speak for themselves on a few key issues.

National Missile Defence

BL: This programme will increase nuclear proliferation and decrease international stability, will cost millions, and will not work... Much of our defence spending goes to dubious, inefficient projects that serve the defence industry, not the national interest.

FF: There are those who argue against increased spending on national defence, that we cannot afford missile defence, and that we have more important things to do with that money. Anyone who says these things after seeing the events of 11 September, is simply not much of an American.

Global Warming

BL: Rising greenhouse gases, rising temperatures and rising flood waters threaten the future well-being of our entire planet. As we speak, old economic inequalities are still being perpetuated and reincarnated in the name of globalisation... See what needs to be done and just do it. See what needs to be changed and change it.

FF: The prophets of darkness never look on the bright side of global warming... Perhaps taking fossil fuels out of the earth and returning them to the carbon cycle is

actually forestalling the next ice age.

The Kyoto Protocol

BL: We must send a strong message to the president and the country that congress will hold Mr Bush to his campaign pledge, that it recognises that global warming poses grave dangers to our environment, our economy, and our national security, and that this country must reduce its CO₂ emissions. We cannot abandon our national and international commitments to a cleaner environment.

FF: We must stop pursuing harmful international treaties – like the Kyoto Protocol, that would reduce our national security, place America at an economic disadvantage and sharply increase our energy costs.

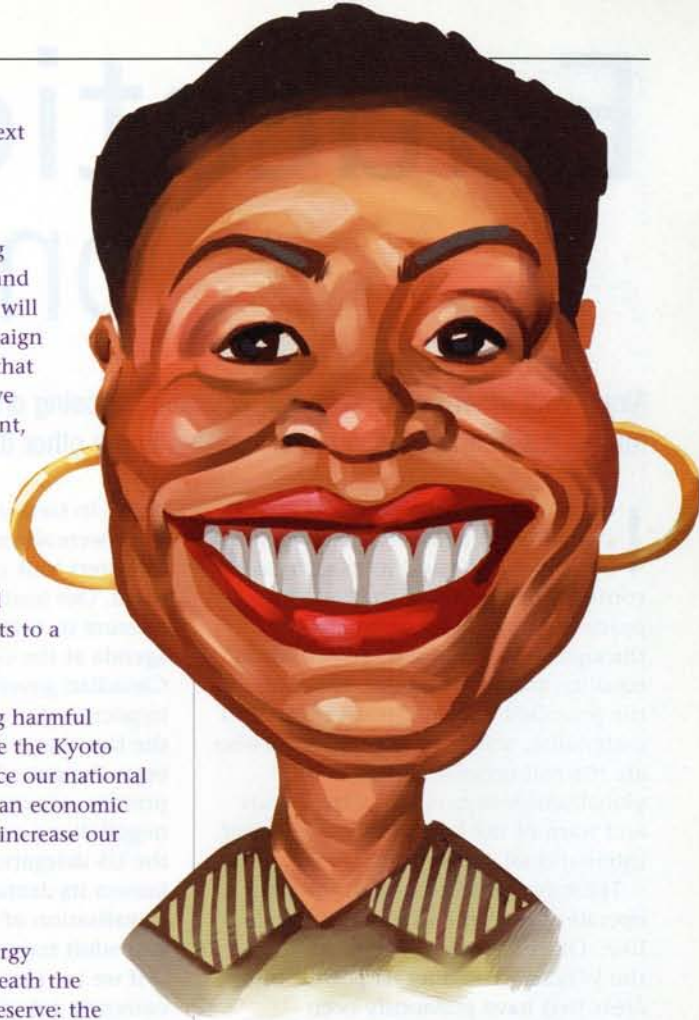
Energy

BL: The answer to our energy problems does not lie beneath the Arctic National Wildlife Reserve: the solution will be found MUCH closer to home.

FF (Malcolm Wallop to World Fuels conference): My subject is the politics of the Kyoto Protocol. My heresy is that consuming energy is good. Energy is the basis of our industrial civilisation and sustains our standard of living. Energy is the foundation stone of our national wealth. That means that producing energy is good... And that means that you are the good guys. And you shouldn't forget it.

Environmentalists

BL: I commend the efforts of activists and advocates, as well as others, in recognising the importance of our world's environmental health on our quality of life. Your insistence on clean air and water for ourselves and generations to come has resulted in remarkable results in these areas. However, we still need a loud voice to rise and to urge the Congress and the Administration to enact needed reform and improvements to Superfund clean-up efforts, the Endangered Species Act, as well as coastal area erosion and clean up, ocean and forest health, and environmental



justice. We have made much progress since the advent of the environmental movement, but we cannot become complacent in our quest for a clean, sound and sustainable environment.'

'We have made much progress, but we cannot become complacent in our quest for a clean, sound and sustainable environment'

FF: Combining illegal and legal, violent and non-violent tactics, these so-called 'Green' revolutionaries employ Lenin's tactical code: Conceal one's true objectives, and mobilise 'useful idiots'. Led by the likes of Greenpeace, Friends of the Earth, and Rainforest Action Network, this cult of the latter-day Left crusades against every consumer, marketer, or developer of natural resource-based products. No producer or consumer is immune. They target people who drink milk, use electricity, live in a home built of wood or consume products made of wood, drive a car, take Viagra, or enjoy a seedless watermelon.

Education: on the ropes

Along with other public services, education is being dragged into the private sector. Yet little is published on the matter. It's time someone started pulling in the other direction, says Laurence Kalafitides.

In order to allay our concerns about globalisation and obtain our support for it, the WTO and its mouthpieces continually emphasise the benefits: peace through trade, prosperity through world economic co-operation, equality, transparent rules. However, the promised advantages never seem to materialise, and the multinationals who are the real beneficiaries of globalisation embroil us in trade wars and warn of the harsh consequences of international competition.

These companies demand the right to operate wherever and however they like'. On the pretext of regulating trade, the WTO is extending its powers into areas that have previously been considered as national prerogatives. Public services, and particularly education, are increasingly coming under fire, having been taken hostage by an obscure pact currently under negotiation: the General Agreement on Trade in Services, or GATS.

The latest round of negotiations

began in Geneva in February 2000. They were shrouded in secrecy, and ministers took care not to publicise them. Our leaders have sought to reassure us that education is not on the agenda at the GATS talks. But the Canadian government is less hypocritical, making no bones about the fact that 'education services have been recognised by many countries as a priority area in view of the forthcoming negotiations on trade in services'.² And the US delegation has already made known its demands in relation to the privatisation of university education and adult training.

If we are to understand what is currently going on at the WTO, we need an overview of what is now regarded as the global market for education.

Education: a 'world market'

Total spending on education amounts to \$2 trillion, or one 20th of world GDP.³ As Glenn R Jones sees it:

'Education is one of the fastest-growing of all markets. Private training and the adult education industry are expected to achieve double-digit growth throughout the next decade.'⁴ Jones, CEO of virtual university Jones International Inc, is head of the Global Alliance for Transnational Education, one of the principal lobbying groups offering consultation to the WTO in its efforts to eliminate barriers to trade.

No wonder GATS is attracting so many covetous eyes, and no wonder funding for state education is being cut back. In the words of the OECD's Moyoto Kamiya: 'Massive reforms are taking place in the state education sector, oriented towards and guided by the market.'⁵ According to UNESCO: 'In a number of countries, the rules on the opening of new schools have been made more flexible, and the management of state schools is being transferred to private companies. The next stage is to turn schools into businesses in their own right.'⁶



Some governments are being totally complacent. In the US, the federal government is working on educational reforms in close collaboration with the National Alliance of Business, a powerful lobby group.⁷

And in New Zealand, parliamentary reforms have resulted in 'the boldest programme of educational liberalisation ever set up in a rich country'.⁸ In the UK, whole swathes of state school management are already in the hands of private companies such as Procter & Gamble and Shell.

In the face of the continued decline in government funding, more and more public-sector universities, including Oxford⁹ and Canada's McGill University, are offering paying courses. Some, such as Monash in Australia, are becoming businesses in their own right.

In Europe, the reforms required to privatise state education are gradually being put in place. But this is a highly sensitive subject, and a great deal of caution is required. Under pressure from the European Round Table of industrialists (ERT), the European Commission has decided to take things in hand, and new information and communication technology offers an ideal pretext for doing so. Under the aegis of European Commissioner Viviane Reding, education ministers have decided to 'mobilise to become fully involved in the new economy'.¹⁰ By the end of 2001, all European schools should be connected to the internet. As the number of teachers continues to fall, and salaries are frozen, an increasing proportion of national education budgets will be devoted to information technology in schools¹¹ – much to the delight of companies making software and

educational products; computer manufacturers such as IBM and Hewlett-Packard; microchip companies such as Intel, Microsoft and Sun; and of course the telecoms giants.

This shift in public spending towards private companies meets the ERT's primary objective. The second is to provide the economy of the 21st century with a modern workforce which is mobile, flexible, and capable of lifelong learning – in its own time and at its own expense.¹²

Every six months, the ERT holds a meeting with the president of the European Union to discuss priorities. Since 1999, this pressure group has been chaired by Morris Tabaksblat, president of the Anglo-Dutch company Reed-Elsevier, which has declared its intention of becoming the world leader in the education and internet publishing sector.

The ERT has also set up a working group on external economic relations to supervise the progress of the WTO talks. This is headed by none other than BP-Amoco chairman Peter

Sutherland, who

'Education, together with health, is the last bastion to be conquered.'

Moyoto Kamiya

was director-general of GATT from 1993 to 1995. This lobby group is very clear about what it wants governments to do: 'Responsibility for training must be assumed by industry once and for all... education should be considered as a service to the economy.'

National educational systems will not be completely eliminated. Under the



Logic of the liberal economy, in which profit-making entities are privatised and loss-making ones are subsidised by the taxpayer, governments will still have a role to play. In the words of the OECD: 'The only role of the public sector will be to ensure access to learning for those who will never be a profitable market, and whose exclusion from society in general will be accentuated as others continue to progress.'¹³ And of course, western countries are not the only ones to be affected by this wave of privatisation.

World Bank in the service of the multinationals

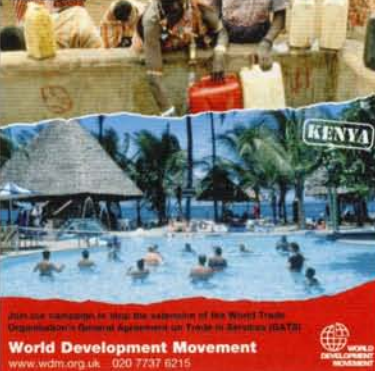
During the 1980s, under combined pressure from the IMF and the World Bank, Third World countries were forced to drastically cut state spending on education, as well as health, welfare and other areas. Teachers were sacked, schools closed, and universities deprived of funding. The situation rapidly became catastrophic.

Just a few years later, the very same bank was expressing its dismay at 'the mediocre quality of education... in the low-income countries'.¹⁴ It said this was all the more damaging because 'the productive use of labour is the main resource of the poor... education, particularly at primary level, helps... to increase the productivity of the poor'. The bank added: 'The current systems of educational finance and management are often unsuitable for the challenges involved,' and invited governments to invest in primary education as a priority!

This apparent benevolence concealed a very specific strategy: the aim was to hand over the secondary and university

Who gets the water, electricity, transport...?

Under new global trade rules, big business, not governments, will decide



Stay alert

For a broader analysis of the scope of GATS, read 'The Last Frontier' by Maude Barlow, which appeared in the Feb 2001 issue of *The Ecologist* and is available on our website, www.theecologist.org. For the latest information go to the Gatswatch website, www.xs4all.nl/~ceo/gatswatch/, or contact the World Development Movement on (+00 44) 0207 737 6215 or at www.wdm.org.uk. The WDM is also running an excellent campaign aimed at stopping GATS.

sectors to the education industry. To do this, the bank encouraged recourse to the private sector.

It goes without saying that if countries wanted access to World Bank loans, they had to toe the line. 'Those countries which are willing to adopt a legislative and regulatory framework for higher education... in which the private sector has a greater involvement in

teaching and finance, will continue to receive priority.'¹⁵ These countries were therefore required to 'reform those educational systems which are directly run by central administrative bodies or the state... (and which) leave little room for manoeuvre'.

The bank puts direct pressure on governments to ensure that they do what they are told, and helps them to 'create an environment which favours the development of the private sector: breaking down legal and regulatory obstacles, accelerating the reform of public enterprises, encouraging the provision of public services by the private sector'. In India, since the early 1990s, successive governments have resolved to implement the time schedule for privatisations dictated by the World Bank. In the state of Kerala, 75 per cent of universities are private, and English is increasingly becoming the language of teaching. In the Ivory Coast, 60 per cent of secondary schools are now private.¹⁷

The education industry is able to cast its net even more widely in Latin America, Africa and Asia, because it has access to market research from the Edinvest database, a service provided by the World Bank. If you want to invest in schools management, student exchange programmes, student loans, 'indigenous education', assessment tests, educational support or distance learning, all you need to do is select a country to find out about the 'wide range of business opportunities' on offer.

In its desire to offer 'a unique market opportunity' to multinationals,¹⁷ the World Bank has set up a particularly successful resource, the Alliance for

GATS: for multinationals, by multinationals

The world of business and the European Commission are almost one and the same entity. The Commission states: 'GATS is not just something which exists between governments. It is first and foremost a tool which benefits business.'²⁵ The directorate-general for external trade (DG 1) is sparing no expense in ensuring that ministers do what business wants them to do. In 1998, its director Leon Brittan held a meeting for European employers to present the 'market access database', a new resource specially designed to speed up the WTO negotiations: 'Tell us which are the markets where you encounter governmental obstacles,' he enthused, 'in other words those which can most easily be eliminated by commercial negotiations.'²⁶ Although Sir Leon ceased to be a member of the Commission in 1999, he still makes regular appearances there in his new role as a lobbyist. In February

2000, he became president of a lobby representing Britain's financial industry, and also vice-president of the bank UBS Warburg.

The current director of DG 1, Pascal Lamy, who is responsible for the WTO talks, is another man who is very much at home with the more arcane aspects of Brussels and the business world. He was *directeur de cabinet* to European Commission president Jacques Delors from 1984 to 1994, and then became managing director of Cr dit Lyonnais, where he supervised the bank's privatisation, and president of the employers' organisation CNPE, now MEDEF.

There are close links between European technocrats and industrialists. In 1998, Leon Brittan and Barclays Bank chairman Andrew Buxton set up a very powerful lobby group, the European Services Forum (ESF)²⁷, to monitor the GATS

Global Learning,¹⁸ specialising in distance or e-learning.

The Alliance 'finances IT rooms, trains teachers, and works with governments and the private sector to develop intervention programmes'. Among its sponsors – sorry, 'partners and generous donors' – are the usual corporate banks, JP Morgan and Goldman Sachs; the consultancy firm Ernst & Young, and various multinational IT companies, such as 3Com and Sun Microsystems.

The latter company is represented by John Gage, a senior manager who summarises the company's ethos as follows: 'At Sun, we recruit our employees by computer, they work on computers, and they're sacked by computer.'¹⁹

Students: poorer than ever

If education is to be industrialised, it must be profitable. So the idea of free universal education has been dumped, despite being enshrined in article 13 of the UN's International Covenant on Economic, Social and Cultural Rights of 1966. The increasing cost of study, both for pupils and their parents, is turning students into the new poor. In 1992, Bertrand Cluzel, the CEO of Educinvest, announced: 'A great future is opening up for commercial education... people will therefore have to learn to make their studies pay.'²⁰

This opinion is shared by Sandy Godfrey, managing director of Deakin University in Australia: 'I know that a lot of university people believe education should be free and universal, but the reality is that it has a commercial value. Investing financially in your education guarantees your

Corporate influence

Commercialism in schools is not new. Corporations have been influencing the agenda through offers of funding, free books, drinks machines and IT equipment for some years. The examples of corporate influence given below are not as a result of GATS, which concerns the wholesale restructuring of schools to be run as businesses. However, they give a fairly good idea of what education really means to business.

Proctor and Gamble produced an educational package called 'Destination Earth', which was distributed to almost 75,000 schools in the US. Inside, it argued that disposable nappies are no worse for the environment than cloth ones. Proctor and Gamble is the world's largest manufacturer of disposable nappies. The package went on to describe garbage-fuelled incineration as 'thermal recycling', but neglected to mention the associated release of dioxins and other toxic materials.

Georgia-Pacific is a corporation with extensive forestry interests. It has produced material distributed to primary schools, which states that forestry is actually beneficial for forests, because 'when no one harvests, trees grow old and are more likely to be killed by rot, disease and the elements. Very old trees will not support many kinds of wildlife because the forest floor is too shaded to grow the ground plants animals need.'

The American Nuclear Society provides a kit to schools in which it explains the problems of nuclear waste disposal thus: 'Anything we produce results in some "leftovers" that are either recycled or

disposed of – whether we're making electricity from coal or nuclear, or making scrambled eggs.'

Pizza Hut once ran a programme called 'Book It' through which young students were rewarded with free pizzas when they reached reading targets.

Sweet manufacturers Jelly Belly provided an educational pack to elementary schools which contained a video tour of the company's plant, science, maths and social studies lesson plans all featuring product tie-ins and 20 sample packets of jelly beans to give away to the children. One teacher, who refused to use the materials in the classroom, explained the problem individual teachers face: 'I was one of the less popular teachers for not passing it out to my kids.'

The most infamous of all such interventions is probably Channel One, a company that uses schools to advertise to captive audiences of around eight million children in the US. It was heavily criticised in Naomi Klein's book *No Logo* and is now the subject of a campaign by Commercial Alert (www.commercialalert.org), supported by Klein, Ralph Nader, David McChesney and David Korten, amongst others. In 1994, Joel Babbit, the then president of Channel One, explained why advertisers like Channel One. 'The biggest selling point to advertisers [is]... we are forcing kids to watch two minutes of commercials.' A bit harsh? Last year two Ohio children were sent to a juvenile detention facility for refusing to watch Channel One in school.

negotiations as closely as possible. The ESF was asked by Robert Madelin, a member of DG I, to list barriers to trade in the 'sensitive' sectors: the environment, the media, health and education.²⁸

In November 2000, the departments headed by Pascal Lamy provided 50,000 euro in funding for an important conference organised by the ESF. Its purpose – to provide an update on the progress of the GATS negotiations! At the conference, held at the Sheraton hotel in Brussels, technocrats from DG I met with members of the WTO's council for trade in services, representatives of the US commerce secretary's office, and numerous European and American lobby groups.

It might sound surprising that US lobbyists were in attendance, given that one of the main topics of conversation was protecting Europe against the US. However, despite the

small number of quibbles between Americans and Europeans, the interests of business on both sides of the Atlantic are increasingly converging, and it is significant that Vivendi Universal was present as part of the United States Coalition of Service Industries.

Although relations between the two sides are not perfect, they are improving thanks to a number of resources specially designed for this purpose.²⁹ The WTO needs to bolster its credibility, and disputes between the two superpowers are bad publicity, which only makes things worse.

But this is not the only difficulty the organisation faces. The countries of the South played a major role in the failure of the Seattle ministerial conference of December 1999. They are even more determined to make their voices heard in the current talks, because GATS was signed despite their opposition.³⁰

associated with owning and running your own Hebridean island? Fyffe shrugs off the question lightly. 'Folk are so committed to this place, maybe it's because we had to fight so hard in the first place that we are now working so hard,' she replies. And grafting they are – all 78 of them. The island now has full and enthusiastic employment.

What are the risks, I wonder, of a place like this attracting too many people who in turn may despoil it? Fyffe counters that they have set upper limits on the amount of tourists that will be allowed to stay on the island at any one time by limiting the amount of accommodation. Their eco-forestry project is fencing off areas to allow native woodland to regenerate. Meanwhile, the conifer plantations established by Schellenberg are being felled and chipped to make paths for eco-tourists. Even the crofters, who have always traditionally used a low-impact form of agriculture, are involved in a project that will allow the corncrake to be re-introduced. There are feasibility studies underway to ensure more of the island gets its power from small-scale hydro-projects.

But, as ever, development issues threaten the island. Caledonian MacBrayne, the private subsidised ferry company that serves all the Hebridean Islands, they insisted that a new pier should be built on Eigg. Currently, visitors catching the Caledonian MacBrayne ferry from the port of Mallaig on the mainland must be transferred to small boats when they reach Eigg because the island's ancient pier is too small for the ferry. In 2003, construction work will begin on a new pier that will extend some 100 feet into the sea. The islanders resisted the plans, but claim that in the end they had no choice but to accept it.

'Their idea of development is totally at odds with ours,' says Dressler. 'For us small is beautiful, but for them big is beautiful. Caledonian MacBrayne is god in this part of the world; it shows you the limits of your decision-making powers.' Just as Schellenberg realised that no man is an island, the islanders have found out that in today's modern economy, no island is an island either.

Apart from the pier controversy, life seems to be going as planned on Eigg. But four years is just a blip in the lifespan of any community. Dressler is worried that she too may one day become part of yet just another ageing population. The litmus test of the community's true health, she says, is



how many young people choose to remain on the island and how many new young people come. The islanders aren't aiming for the pre-clearance population of 400, but most agree that at least 100 more people could eventually be accommodated. But if you want to go there you'll have to prove your worth. Ideal candidates are highly practical, self-sufficient Gaelic speakers.

For academic and activist Alastair McIntosh, the experiment with community land ownership on Eigg is a massive success. As one of the founding members of the Eigg Heritage Trust, he

sees the victory as part of a larger sea-change that is slowly righting the wrongs that stretch back to the Highland Clearances. In his new book, *Soil and Soul*, he describes how the victory on Eigg is just part of a larger struggle to return Scotland to the Scottish people.

'The idea of the Heritage Trust was not to make the residents into owners in the private sense of that word. Rather, most would remain tenants, but effectively become landlords under their own democratic accountability. This would be a 'third way' approach to land holding – 'communitarian' rather than capitalist or communist... This can allow for individual entrepreneurial freedom within a framework of mutual accountability and democratically-controlled planning safeguards. Such a system offers a pattern and example for land reform that could perhaps go much wider than Eigg or Assynt [the first modern community buyout in 1992].'

Scottish land reform campaigners complain that the new Land Reform Bill is too inflexible, places too much power in the hands of ministers, and includes only limited powers of compulsory purchase. Leading Scottish activist and writer Andy Wightman says that the new legislation is primarily motivated by the Scottish government's need to have a response should a Schellenberg-type drama come about in the future. But, he says, 'we're living in an exciting time, and we've only just begun. In the areas where community buyouts have succeeded, the people are liberated. Life has returned to normal.'

On Eigg, Dressler, Fyffe and others, inhabitants are now using their islands as a base from which to help other communities reclaim land. They have founded the Community Land Action Group (CLAG). 'It's our duty to put something back in the pot,' says Dressler, 'and by initiating the CLAG (which means bell in Gaelic) we are calling all citizens to consider new and sustainable relationships between the land of Scotland and its people.'

In Scotland today, the bell is ringing ever louder ■

Jake Bowers is a freelance journalist, Romani activist and co-founder of Earth First!, the environmental direct action group.

For more information look at: www.isleofeigg.org, www.clag.org, and www.caledonia.org.uk/land
Soil and Soul: People versus Corporate Power, by Alastair McIntosh hardback from Aurum Press, £17.99.

income and assures your future.'

But for millions of students the future is synonymous with debt, and student grants are increasingly made on the basis of performance rather than need. At Columbia University, for example, students graduate with debts of between \$20,000 and \$50,000

depending on the subject and the length of the course. In Africa, even for heavily subsidised programmes such as the African Virtual University, the cost of online degrees from foreign universities is prohibitive. Each course unit, which is made available from Canada, the United Kingdom or the US,

costs \$200 to \$300.²¹ What is more, in many countries the deregulation of course fees allows higher fees to be charged to foreigners.

In Canada, employers in the Montreal chamber of commerce are currently exerting pressure to liberalise university tuition fees.

On whose authority?

Despite an abysmal track record, Accenture is one of the preferred bidders for the contract to privatise the UK's local education authorities. Solomon Hughes wonders why.

Patricia Hewitt, the new Secretary of State for Trade and Industry, who has responsibility for international trade issues, was the director of research for global consulting group Andersen Consulting from 1994 to 1997. Andersen, now re-named Accenture, is a member of the US Coalition of Service Industries, the business lobby group that effectively invented GATS. The coalition's members could benefit if GATS compels individual nations to put public services out to private tender.

Hewitt's job with Accenture blazed a trail for New Labour's friendship with big business; and since entering the government she has kept up her links with the company. For example, when Hewitt's former ministerial public relations officer Vicki Trinder left the minister, she went to work for the public relations team at Accenture.

And when Hewitt was promoted to Secretary of State for Trade she celebrated her new authority by delivering a keynote address to none other than Accenture. In the speech she told the assembled businesspeople that opponents of the WTO were doing more harm than good. In an elegant phrase she said protesters 'are cutting poor countries off from the pathway out of poverty'.

However, the track record of Hewitt's former employer Accenture suggests that it is more concerned about pathways into privatisation than pathways out of poverty. The firm specialises in privatising government services – it has been a pioneer where individual nations have decided to contract out their activities. And now under GATS such privatisations could become a legal necessity rather than just a matter of political choice, all done of course in the name of 'free trade in services'.

In the UK, Accenture was given a place on the list of contractors allowed to bid for the privatisation of Local Education Authority services. The firm also specialises in running welfare and benefit services for the poor. However, while Accenture has made good profits in this area, its vulnerable clients and government customers have often suffered.

Accenture won a contract to run the British social security system, NIRS2, which collects and distributes National Insurance payments for the unemployed and retired. The company began work in 1995, but when the system came on line many users found the benefits delayed or disrupted. By 1999, the government was offering extra compensation to the 'thousands of people who are being underpaid benefit'. The government ended up spending £40 million repairing the damage, although few costs were passed on to Accenture.

Not that this was a one off. In fact, the NIRS2 failure was a re-run of events in North America. In Ontario, Canada, Accenture won the contract to slash jobs and welfare rolls on a 'social assistance' project from 1997 onwards. However, while Accenture stood to earn 180 million Canadian dollars, the auditor general was not impressed, attacking the scheme in reports in 1998 and 2000. The auditor argued: 'We continue to question the achievement of value for money for taxpayers in this agreement'. The

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deal was 'failing to deliver' the promised new technology. Such inadequacies, however, did not stop project managers at Accenture from charging the state 575 Canadian dollars an hour.

And this debacle had a precedent too. In Nebraska, where Accenture ran a privatised welfare support system, there were \$24 million in cost over-runs. In 1997, the state auditor, John Breslow, said 'I've been auditor for six years and this is the most wasteful project I have ever heard of. It's like pouring money down a deep dark hole'.

In Texas a 1997 Accenture child support system had a \$63.7 million cost over-run, and a final cost 600 per cent higher than the tender. And in Virginia in 1996 Accenture had a 150 per cent cost over run on a contract to redesign the social security systems.

All in all, a pretty unimpressive record. And now, through the WTO's enforced GATS treaty, Hewitt's old employer will be able to export these successes from the developed to the developing world.

Solomon Hughes is a freelance journalist.

Western countries are already engaged in heated competition to attract foreign students who can finance their own studies. Worldwide, this market is worth an estimated £13 billion.²² This market is a priority for Edufrance, an agency set up in 1998 by the French education and foreign ministries and headed by François Blamont, the former president of Thomson CSF subsidiary Sodeteg. But if this 'student market' is to be expanded, young people who cannot afford to pay for their education will need to be attracted. Student loan systems are therefore being set up in many countries; in the Third World, such projects are being operated by the World Bank in partnership with leading international financial institutions such as Citibank. The World Bank has expressed some

'A great future is
opening up for commercial
education. People must
learn to make their
studies pay.'
**Bertrand Cluze, CEO of
Educinvest**

concern about the risks involved, and says quite shamelessly: 'Of course, there will be problems in obtaining repayment in countries where even well qualified people find it hard to gain employment. But the question is worth examining, and a real or personal guarantee could even be obtained from borrowers or their families.'²³

From crèches to adult training, the whole of the education system is being

affected by this wave of privatisation. But industrialisation is most widespread in the university and adult training sectors, which is why these are the only two areas covered by the current WTO talks.

Resistance

Large numbers of organisations that were present at the Battle of Seattle have joined forces on a platform of either bending the WTO to their will, or abolishing it. This conclusion is inevitable because, in the words of Lionel Jospin, GATS is 'neither amendable nor negotiable'.²⁴ We should ensure that the current negotiations are immediately halted, carry out a thorough evaluation of the agreement's consequences, and if necessary have it de-ratified ■

Laurence Kalafatidès is a self-taught freelance researcher. She is a member of the Observatoire de la Mondialisation and vice-president of the Institut pour la Relocalisation de l'Economie.

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Free Range Eigg

The Isle of Eigg has become a landmark test case in the changing land ownership structure of Scotland. Jake Bowers goes there to see whether community ownership is all it's cracked up to be.

Look around at the volcanic peaks and white sandy beaches and you could be in any number of exotic Pacific locations. But you're not. And it's not just the cold Atlantic wind that brings you back down to earth – it's the silence.

Here on the west coast of Scotland, life is not nearly as teeming as it should be. Despite the mountains, fertile soils and Gulf stream, this place is quite rightly described as a 'wet desert'. When tourists gaze with awe at the heather and conifer plantations that now cloak the highlands they are often unaware that a vast forest and a highly communitarian society thrived here for thousands of years.

The people, wolves and countless other forest species that once lived here were cleared in the name of 'agricultural improvement', to be replaced by that most impressive of animals – the sheep. The wild animals were shot, the wild plants were felled, and the wild people were burnt out of their houses before being chained like slaves and forced on to ships to Canada, or lowland industrial cities like Glasgow. Those were the times of the Highland Clearances, when 'landownership' was all, and when half a million highlanders were sent to help transform the new world into a depressing replica of the old.

But the hills are beginning to stir

again. Scotland, which still has a more concentrated pattern of 'landownership' than Brazil, has embarked on a far-reaching land reform process.

I will arise and go now

It's officially summer in the fishing village of Arisaig, but gale force winds have stopped the ferry I've been awaiting for the past 24 hours. Standing on the quayside, it's hard to imagine that 150 years ago this port took cargoes of indigenous people across the Atlantic to Canada. Today, boats from Arisaig don't take passengers to Canada, but to the Island of Eigg, epicentre of this new land reform movement.



should, in theory, be easier than ever before.

Ever since the highland clans were defeated in the battle of Culloden in 1745, the use for their land had somewhat dissolved, and their territories were turned into private property. Unfortunately for the people that remained, the hunting estates that these lands were turned into often became private dictatorships. The island of Eigg was first sold by Clanranald in 1828 for £15,000. But over the course of the previous hundred years or so, the self-sufficient community of 400 people with 1,000 acres in arable cultivation had already been converted into a sporting estate. Between 1788 and 1790 alone, 176 people were cleared from Eigg. Many of those that later remained worked as estate workers or crofters, whose right of tenure to practise small-scale peasant agriculture was protected by law.

When Schellenberg arrived in 1975, he reportedly came with good intentions. But it wasn't long before his promises of investment were forgotten, and evictions threatened. Houses crumbled, repairs weren't made and tenancies were denied to the increasingly resentful islanders.

Perhaps inevitably, the islanders revolted. Someone torched his antique Rolls-Royce, prompting him to retreat to the mainland, from where he sold the island to a bizarre and remote German performance artist called Maruma. Finally, on 12 June 1997, the Eigg Heritage Trust – a unique partnership between the residents, the Scottish Wildlife Trust and the Highland Council – bought the island. The protracted struggle, with all its twists and turns, had made the island famous. Four years on the community is not just surviving, but thriving. And, across the Highlands the story is repeating itself, in places like Assynt, Knoydart, and Orbst.

When I finally get to the island, I meet Camille Dressler outside the island's new shop and tearoom. As a local historian, Camille knows the twists and turns of Eigg's turbulent history better than most.

'There's no doubt that Eigg has become an emblematic case for the whole cause of land reform in Scotland. We've helped to put land reform back on the political agenda. For the media this story was very sexy, because it had all the right elements.' Camille speaks with an accent that works in layers, one

moment it is French, the next it is Scottish, sometimes it is both at the same time. Like many of the movers and shakers behind the revolution on Eigg she comes from elsewhere, but after 17 years on the island feels totally at home.

Of Eigg's 78 inhabitants, only one-third are indigenous. There appear to be no representatives at all of the millions of displaced Scots of Highland descent who now live on housing estates, and who suffer some of the worst rates of heart disease and alcoholism in the world. Perhaps more than anyone, they are the real displaced natives that true land reform should benefit.

DJ Kirk remembers Schellenberg well. He grew up on the island, as did five generations of his family before him. 'Schellenberg started off well, but then he lost interest in the island,' says DJ. 'It became his playground, it was like a small dictatorship.' DJ remembers how his brother was evicted after three days notice because of a minor disagreement with the laird. Having now returned after working on the mainland for four years, DJ survives on a mixture of car maintenance and a new eco-forestry project. His wife runs a bed and breakfast and his daughter is one of only four children at the island's tiny school.

'This is local democracy in action,' he enthuses. 'But it's not idyllic. In the winter you can go two weeks without contact with the mainland. You'll never become rich here, but money isn't as important as happiness.'

Maggie Fyffe, Secretary of the Eigg Trust, is quick to dispel any notion that the island is an autonomous eco-republic going its own way. But it does have an air of anarchy about it. There's no policeman on the island, but there is a doctor. The cars are MOT exempt. Locals drive about with number plates and windscreens missing.

'The difference here from six years ago is like the difference between night and day,' says Fyffe. 'The first thing we did when we bought the island was set up leases for the residents or give them the option to buy their own houses. The second thing we did, with the help of council funding, was build the new tea room and shop. We started planning what we would do in the Schellenberg years. We realised then that you couldn't develop anything unless you've got security of tenure.'

But rights, as we are forever being told, also confer responsibilities. I wonder if there are any burdens

In 1997, for £1.5 million the islanders bought their 7,500-acre Hebridean Island, complete with farms and housing stock, in one of the most beautiful parts of Britain. Their protracted struggle to rid themselves of their notorious laird (landowner) Keith Schellenberg attracted media attention from around the world, and thanks to an anonymous million pound donation, and smaller donations from another 10,000 people, the islanders finally became masters of their own destiny. The victory on Eigg is just one of 35 community land buyouts that have happened across Scotland in the last 10 years. When the Scottish parliament puts the finishing touches to its flagship land reform bill this autumn, successes like the one on Eigg

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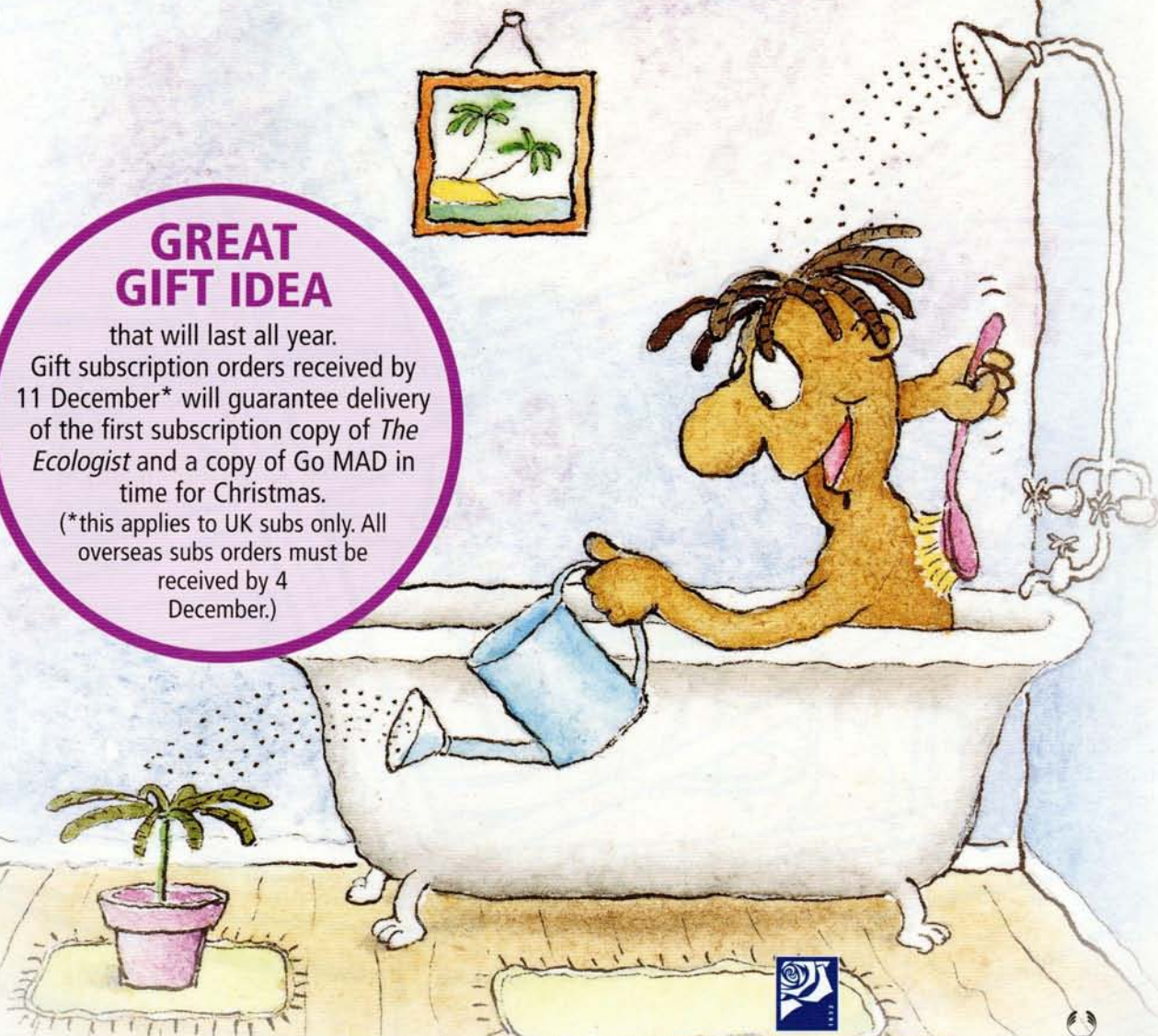
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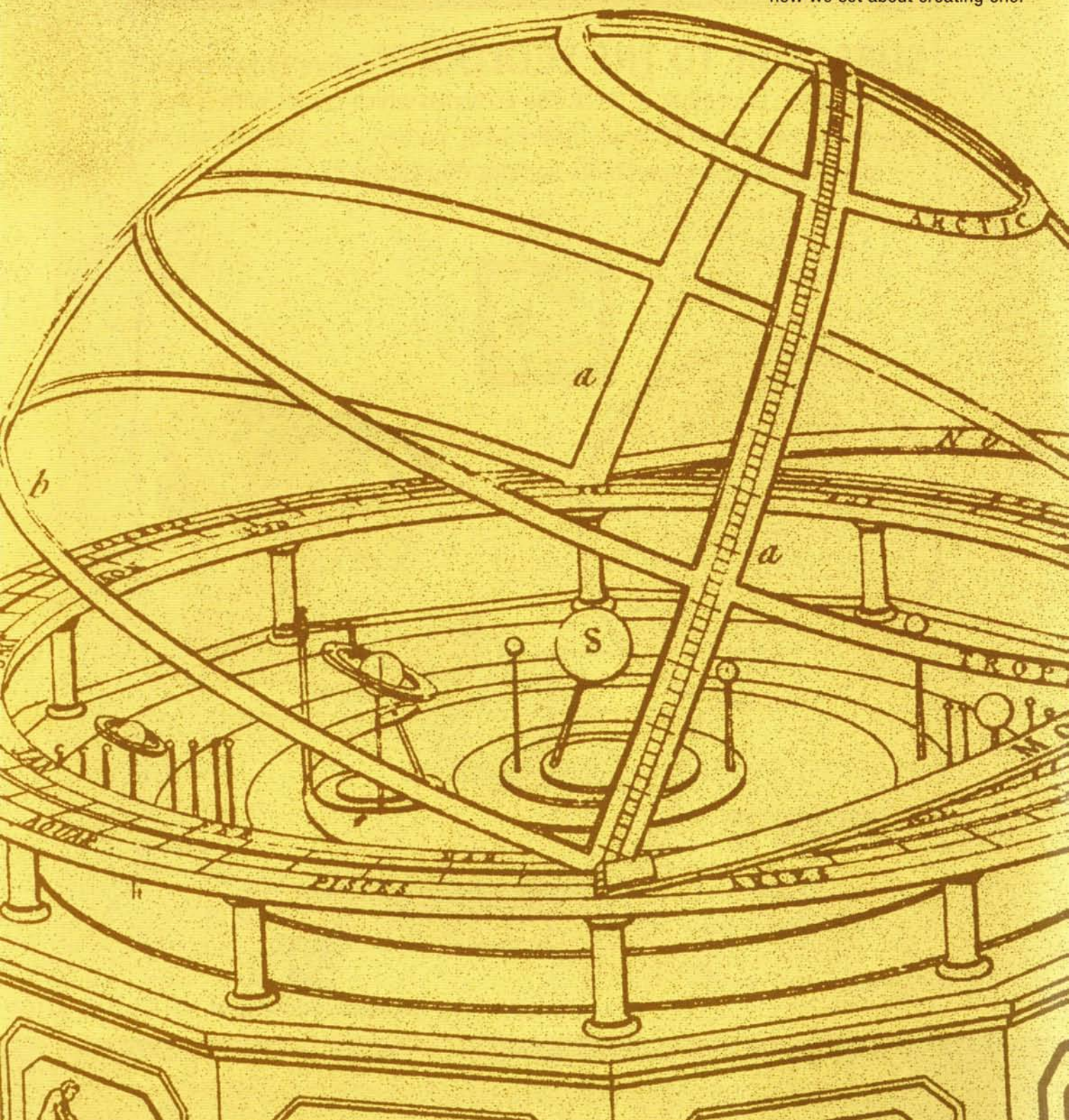


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What goes around...

One of the common criticisms laid at the feet of the anti-globalisation movement and magazines such as *The Ecologist* is that they never offer any solutions to the problems facing the world. However, in his forthcoming book, *Eco Economy*, **Lester Brown**, chairman of the world's most respected environmental research organisation, the Worldwatch Institute, and now President of Earth Policy Institute, an organisation he founded in May 2001, does exactly that. Over the next three issues the *Ecologist* will be exclusively serialising excerpts from his book, explaining why the world needs an eco-economy, what an eco-economy is, and finally, how we set about creating one.



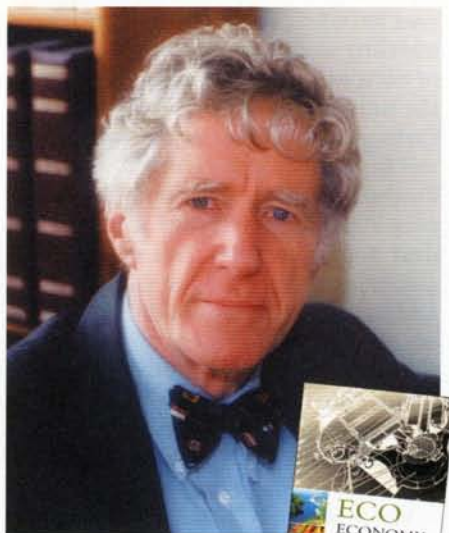
In September, the final steps towards China entering the WTO were implemented. In November, the next round of WTO talks take place under maximum security in Qatar. In short, the talks will decide that the solution to the world's problems lies in further economic growth through expansion of the free market.

In this first excerpt, taken from the book's first chapter, 'The Economy and the Earth', Lester Brown explains why we have to dramatically alter the focus of our world view from economics to ecology.

In 1543, Polish astronomer Nicolaus Copernicus published *On the Revolutions of the Celestial Spheres*, in which he challenged the view that the sun revolved around the earth, arguing instead that the earth revolved around the sun. With his new model of the solar system, he began a wide-ranging debate among scientists, theologians, and others. His alternative to the earlier Ptolemaic model, which had the earth at the centre of the universe, led to a revolution in thinking, to a new worldview.¹

Today we need a similar shift in our worldview, in how we think about the relationship between the earth and the economy. The issue now is not which celestial sphere revolves around the other but whether the environment is part of the economy or the economy is part of the environment.

The differences between ecology and economics are fundamental. For example, ecologists worry about limits, while economists tend not to recognise such



Lester R Brown has been described by the *Washington Post* as 'one of the world's most influential thinkers'. *Calcutta's Telegraph* called him 'the guru of the global environmental movement'. The Library of Congress has requested Brown's personal papers and manuscripts, recognising the role of his work and that of the Worldwatch Institute, under his direction, in shaping the global environmental movement of the late 20th century.

constraints. Ecologists, taking their cue from nature, think in terms of cycles, while economists are more likely to think linearly, or curvilinearly. Economists look at the unprecedented growth of the global economy and of international trade and investment and see a promising future with more of the same. Ecologists look at this same growth and realise that it is the product of burning vast quantities of artificially cheap fossil fuels, a process that is destabilising the climate. While economists see booming economic indicators, ecologists see an economy that is altering the climate with consequences that no one can foresee.²

Ecologists view the market with less reverence because they see a market that is not telling the truth. They know that a stable relationship between the economy and the earth's ecosystem is

essential if economic progress is to be sustained.

Although the idea that economics must be integrated into ecology may seem radical to many, evidence is mounting that it is the only approach that reflects reality. When observations no longer support theory, it is time to change the theory – what science historian Thomas Kuhn calls a paradigm shift. If the economy is a sub-set of the earth's ecosystem, as I contend, the only formulation of economic policy that will succeed is one that respects the principles of ecology.³

Economy Self-destructing

Although many of us live in a high-tech urbanised society, we are as dependent on the earth's natural systems as our hunter-gatherer forebears were. To put ecosystems in economic terms, a natural system, such as a fishery, functions like an endowment. The interest income from an endowment will continue in perpetuity as long as the endowment is maintained. If the endowment is drawn down, income declines. If the endowment is eventually depleted, the interest income disappears. And so it is with natural systems. If the sustainable yield of a fishery is exceeded, fish stocks begin to shrink. Eventually stocks are depleted and the fishery collapses. The cash flow from this endowment disappears as well.

As we begin the 21st century, our economy is slowly destroying its support systems, consuming its endowment of natural capital. Demands of the expanding economy, as now structured are surpassing the sustainable yield of ecosystems. Easily a third of the world's cropland is losing topsoil at a rate that is undermining its long-term productivity. Fully 50 per cent of the world's rangeland is overgrazed and deteriorating into desert. The world's forests have shrunk by about half since the dawn of agriculture and are still shrinking. Two thirds of oceanic fisheries are now being fished at or beyond their capacity; overfishing is now the rule, not the exception. And overpumping of underground water is common in key food-producing regions.⁴

The rangelands that supply much of

the world's animal protein are also under excessive pressure. As human populations grow, so do livestock numbers. With 180 million people worldwide now trying to make a living raising 3.3 billion cattle, sheep, and goats, grasslands are simply collapsing under the demand. As a result of overstocking, grasslands are now deteriorating in much of Africa, the Middle East, Central Asia, the northern part of the Indian sub-continent, and much of northwestern China.

In China, the combination of overplowing and overgrazing to satisfy rapidly expanding food needs is creating a dust bowl reminiscent of the US Dust Bowl of the 1930s – but much larger. In a desperate effort to maintain grain self-sufficiency, China has ploughed large areas of the northwest, much of it land that is highly erodible and should never have been ploughed.⁵

As the country's demand for livestock products – meat, leather, and wool – has climbed, so have the numbers of livestock, far exceeding those of the US, a country with comparable grazing capacity. In addition to the direct damage from overplowing and overgrazing, the northern half of China is literally drying out as aquifers are depleted by overpumping.⁶

These trends are converging to form some of the largest dust storms

ever recorded. The huge dust plumes, traveling eastward, affect the cities of northeast China – blotting out the sun and reducing visibility. Eastward-moving winds also carry soil from China's northwest to the Korean Peninsula and Japan, where people regularly complain about the dust clouds that filter out the sunlight and blanket everything with dust. Unless China can reverse the overplowing and overgrazing trends that are creating the dust bowl, these trends could spur massive migration into the already crowded cities of the northeast and undermine the country's economic future.⁷

Water tables are falling under large expanses of the three leading food-producing countries – China, India, and the US. Under the North China Plain, which accounts for 25 per cent of China's grain harvest, the water table is falling by roughly 1.5 metres (5 feet) per year. China's Yellow River, the cradle of Chinese civilisation, runs dry for part of each year, depriving farmers in its lower reaches of irrigation water.

Economic demands on forests are also excessive. Record flooding in the Yangtze River basin during the summer of 1998 drove 120 million people from their homes. Although initially referred to as a 'natural disaster,' the removal of 85 per cent of the original tree cover in the basin had left little vegetative cover

to hold the heavy rainfall.⁸

Deforestation also diminishes the recycling of water inland, thus reducing rainfall in the interior of continents. When rain falls on a healthy stand of dense forest, roughly one quarter runs off, returning to the sea, while three quarters evaporates, either directly or through transpiration. When land is cleared for farming or grazing or is clearcut by loggers, this ratio is reversed – three quarters of the water returns to the sea and one quarter evaporates to be carried further inland. As deforestation progresses, nature's mechanism for watering the interior of large continents such as Africa and Asia is weakening.⁹

Learning from China

The flow of startling information from China helps us understand why our economy cannot take us where we want to go. Not only is China the world's most populous country, with nearly 1.3 billion people, but since 1980 it has been the world's fastest-growing economy – expanding more than fourfold. In effect, China is telescoping history, demonstrating what happens when large numbers of poor people rapidly become more affluent.¹⁰

As incomes have climbed in China, so has consumption. The Chinese have already caught up with Americans in pork consumption per person and they

are now concentrating their energies on increasing beef production. Raising per capita beef consumption in China to that of the average American would take 49 million additional tonnes of beef. If all this were to come from putting cattle in feedlots, American-style, it would require 343 million tonnes of grain a year, an amount equal to the entire US grain harvest.¹¹

In Japan, as population pressures on the land mounted during a comparable stage of its economic development, the Japanese turned to the sea for their animal protein. Last year, Japan consumed nearly 10 million tonnes of seafood. If China, with 10 times as many people as Japan, were to try to move down this same path, it would need 100 million tonnes of seafood – the entire world fish catch.¹²

In 1994, the Chinese government decided that the country would develop an automobile-centred transportation system and that the automobile industry would be one of the engines of future economic growth. Beijing invited major automobile manufacturers, such as Volkswagen, General Motors, and Toyota, to invest in China. But if Beijing's goal of an auto-centred transportation system were to materialise and the Chinese were to have one or two cars in every garage and were to consume oil at the US rate, China would need over 80 million

barrels of oil a day – slightly more than the 74 million barrels per day the world now produces. To provide the required roads and parking lots, it would also need to pave some 16 million hectares of land, an area equal to half the size of the 31 million hectares of land currently used to produce the country's 132-million-tonne annual harvest of rice, its leading food staple.¹³

Similarly, consider paper. As China modernises, its paper consumption is rising. If annual paper use in China of 35 kilograms per person were to climb to the US level of 342 kilograms, China would need more paper than the world currently produces. There go the world's forests.¹⁴

We are learning that the western industrial development model is not viable for China, simply because there are not enough resources for it to work. Global land and water resources are not sufficient to satisfy the growing grain needs in China if it continues along the current economic development path. Nor will the existing fossil-fuel-based energy economy supply the needed energy, simply because world oil production is not projected to rise much above current levels in the years ahead. Apart from the availability of oil, if carbon emissions per person in China ever reach the US level, this alone would roughly double global emissions, accelerating the rise in the atmospheric

CO₂ level.¹⁵

China faces a formidable challenge in fashioning a development strategy simply because of the density of its population. Although it has almost exactly the same amount of land as the US, most of China's 1.3 billion people live in a 1,500-kilometre strip on the eastern and southern coasts. Reaching the equivalent population density in the US would require squeezing the entire US population into the area east of the Mississippi and then multiplying it by four.¹⁶

Interestingly, the adoption of the western economic model for China is being challenged from within. A group of prominent scientists, including many in the Chinese Academy of Sciences, wrote a white paper questioning the government's decision to develop an automobile-centred transportation system. They pointed out that China does not have enough land both to feed its people and to provide the roads, highways, and parking lots needed to accommodate the automobile. They also noted the heavy dependence on imported oil that would be required and the potential air pollution and traffic congestion that would result if they followed the US path.¹⁷

If the fossil-fuel-based, automobile-centred, throwaway economy will not work for China, then it will not work for India with its 1 billion people, or



for the other 2 billion people in the developing world. In a world with a shared ecosystem and an increasingly integrated global economy, it will ultimately not work for the industrial economies either.

China is showing that the world cannot remain for long on the current economic path. It is underlining the urgency of restructuring the global economy, of building a new economy – an economy designed for the earth.

The Acceleration of History

Rapidly advancing technology is accelerating history, making it difficult for social institutions to manage it effectively. This is also true for unprecedented world population growth, even faster economic growth, and the increasingly frequent collisions between the expanding economy and the limits of the earth's natural systems. The current rate of change has no

earlier stages of the Industrial Revolution, economic expansion rarely exceeded 1 or 2 per cent a year. Developing countries that are industrialising now are doing so much faster than their predecessors simply because they do not have to invent the technologies needed by a modern industrial society, such as power plants, automobiles, and refrigerators. As a result, the countries that were successfully industrialising in the late 20th century did so at a record rate. Economic growth in the developing countries of East Asia, for instance, has averaged almost 7 per cent annually since 1990 – far higher than growth rates in industrial countries at any time in their history.²⁰

The pace of history is also accelerating as soaring human demands collide with the earth's natural limits. National political leaders are spending more time dealing with the

existing oceanic fish catch may be possible only if numerous agreements are reached among countries on the limits to fishing in individual oceanic fisheries. And can governments, working together at the global level, move fast enough to stabilise climate before it disrupts economic progress?

The issue is not whether we know what needs to be done or whether we have the technologies to do it. The issue is whether our social institutions are capable of bringing about the change in the time available. As HG Wells wrote in *The Outline of History*, 'Human history becomes more and more a race between education and catastrophe.'²¹

The Option: Restructure or Decline

Whether we study the environmental undermining of earlier civilisations or look at how adoption of the western industrial model by China would affect the earth's ecosystem, it is evident that



precedent. Until recently, population growth was so slow that it aroused little concern. But since 1950 we have added more people to world population than during the preceding 4 million years since our early ancestors first stood upright. Economic expansion in earlier times was similarly slow. To illustrate, growth in the world economy during the year 2000 exceeded that during the entire 19th century.¹⁸

Throughout most of human history, the growth of population, the rise in income, and the development of new technologies were so slow as to be imperceptible during an individual life span. For example, the climb in grainland productivity from 1.1 tonnes per hectare in 1950 to 2.8 tonnes per hectare in 2000 exceeds that during the 11,000 years from the beginning of agriculture until 1950.¹⁹

The world economy is growing even faster. The sevenfold growth in global output of goods and services since 1950 dwarfs anything in history. In the

consequences of the collisions described earlier – collapsing fisheries, falling water tables, food shortages, and increasingly destructive storms – along with a steadily swelling international flow of environmental refugees and the many other effects of overshooting natural limits. As change has accelerated, the situation has evolved from one where individuals and societies change only rarely to one where they change continuously. They are changing not only in response to growth itself, but also to the consequences of growth.

The central question is whether the accelerating change that is an integral part of the modern landscape is beginning to exceed the capacity of our social institutions to cope with change. Change is particularly difficult for institutions dealing with international or global issues that require a concerted, co-operative effort by many countries with contrasting cultures if they are to succeed. For example, sustaining the

the existing industrial economic model cannot sustain economic progress. We spend a lot of time worrying about our economic deficits, but it is the ecological deficits that threaten our long-term economic future. Economic deficits are what we borrow from each other; ecological deficits are what we take from future generations.²² Herman Daly, the intellectual pioneer of the fast-growing field of ecological economics, notes that the world 'has passed from an era in which manmade capital represented the limiting factor in economic development (an 'empty' world) to an era in which increasingly scarce natural capital has taken its place (a 'full' world).'

When our numbers were small relative to the size of the planet, it was humanmade capital that was scarce. Natural capital was abundant. Now that has changed. As the human enterprise continues to expand, the products and services provided by the earth's ecosystem are increasingly scarce, and

natural capital is fast becoming the limiting factor while humanmade capital is increasingly abundant.²³

Transforming our environmentally destructive economy into one that can sustain progress depends on a Copernican shift in our economic mindset. A redesigned economy can be integrated into the ecosystem in a way that will stabilise the relationship between the two, enabling economic progress to continue. Unfortunately, present-day economics does not provide the conceptual framework needed to build such an economy. It will have to be designed with an understanding of basic ecological concepts such as sustainable yield, carrying capacity, nutrient cycles, the hydrological cycle, and the climate system. Designers must also know that natural systems provide not only goods, but also services – services that are often more valuable than the

ecological consequences of our decisions? The answer is probably not. It simply may not be possible.

But there may be another approach, a simpler way of achieving our goal. Everyone making economic decisions relies on market signals for guidance. The problem is that the market often fails to tell the ecological truth. It regularly underprices products and services by failing to incorporate the environmental costs of providing them.

Compare, for example, the cost of wind-generated electricity with that from a coal-fired power plant. The cost of the wind-generated electricity reflects the costs of manufacturing the turbine, installing it, maintaining it, and delivering the electricity to consumers.

The cost of the coal-fired electricity includes building the power plant, mining the coal, transporting it to the power plant, and distributing the electricity to consumers. What it does

intelligent, ecologically responsible decisions.

We can build an eco-economy with existing technologies. It is economically feasible if we can get the market to tell us the full cost of the products and services that we buy.

The question is not how much will it cost to make this transformation but how much it will cost if we fail to do it. Øystein Dahle, retired Vice President of Esso for Norway and the North Sea, observes, 'Socialism collapsed because it did not allow prices to tell the economic truth. Capitalism may collapse because it does not allow prices to tell the ecological truth.'²⁴

Building an eco-economy is exciting and satisfying. It means we can live in a world where energy comes from wind turbines instead of coal mines, where recycling industries replace mining industries, and where cities are designed for people, not for cars. And perhaps



goods.

We know the kind of restructuring that is needed. In simplest terms, our fossil-fuel-based, automobile-centred, throwaway economy is not a viable model for the world. The alternative is a solar/hydrogen energy economy, an urban transport system that is centred on advanced-design public rail systems and that relies more on the bicycle and less on the automobile, and a comprehensive reuse/recycle economy. And we need to stabilise population as soon as possible.

How do we achieve this economic transformation when all economic decision makers – whether political leaders, corporate planners, investment bankers, or individual consumers – are guided by market signals, not the principles of ecological sustainability? How do we integrate ecological awareness into economic decision making? Is it possible for all of us who are making economic decisions to 'think like ecologists,' to understand the

not include is the cost of climate disruption caused by carbon emissions from coal burning – whether it be more destructive storms, melting ice caps, rising sea-level, or record heat waves. Nor does it include the damage to freshwater lakes and forests from acid rain, or the health care costs of treating respiratory illnesses caused by air pollution. Thus the market price of coal-fired electricity greatly understates its cost to society.

One way to remedy this situation would be to have environmental scientists and economists work together to calculate the cost of climate disruption, acid rain, and air pollution. This figure could then be incorporated as a tax on coal-fired electricity that, when added to the current price, would give the full cost of coal use. This procedure, followed across the board, would mean that all economic decision makers – governments and individual consumers – would have the information needed to make more

most important of all, we will have the satisfaction of building an economy that will support, not undermine, future generations ■

References on page 66.

This article is an abridged excerpt from Lester Brown's forthcoming book *Eco-Economy*, published at the end of December in the UK, and in November in the US. UK readers can purchase it at a reduced price of £15.99 (rrp £17.99) by calling the publishers Earthscan on +44 (0)1903 828 503 and mentioning *The Ecologist* (free P&P in UK, for customers outside the UK please add £3.60 plus £1 for airmail). For readers in North America, it is available priced \$13 (rrp \$17) by calling the Earth Policy Institute on +1 202 496 9290 or by emailing epi@earth-policy.org. Next month, Lester Brown explains what an eco-economy would look like in practice.



LINGUISTIC GUERRILLA WARFARE

Jeremy Seabrook sees the 'Greening' of multinationals and financial institutions as a sinister organised deception to subvert grassroots movements for change.

Of late, the agencies of global dominance have adopted a common strategy against those who dissent from the 'historical inevitability' of globalisation. It is as if they had suddenly learned the value of cooperation rather than competition. But they cooperate with each other only to face down challenges to competition itself. Their strategy is one of ostensibly bowing to their detractors by incorporating the critical rhetoric into their own programmes. In postures of perpetual penitence, the World Bank, the IMF, the WTO, the transnational corporations and the G8 governments have absorbed the doctrines of equity and sustainability, reproducing them in parodic prose and loudly proclaiming their past errors.

There is nothing new in this, except that the scale of the linguistic subversion has increased exponentially with the growth of the ecological movement. Fifteen years ago, criticisms of world financial institutions were still only whispers off-stage and to call into question the wisdom of the capitalist seers was the prerogative of misguided fanatics and extremists. Nonetheless, supporters of incipient globalisation showed themselves sensitive to the faintest breath of criticism, as if shoring up their defences against future conflict. The World Bank was astonished by the anger it had caused in supporting the Polonoroeste hydroelectric project in Brazil and the colonial transmigration policy of Indonesia, whereby indigenous West Papuans were brutally dispossessed by planted settlers from Java and Sumatra. After these public relations debacles, it was the first international financial institution to concede that there might be ecological limits to economic growth, a key Green criticism of capitalist development. From then on, its officials have repeated, parrot-fashion, the environmental pieties they have learned from their harshest critics.

Quickly, other organisations with global tentacles recognised the

propaganda value and the consumer benefits of espousing 'Green' concerns. To every objection that surfaced, they responded not with robust counter-attack but with contrite acceptance and commitment to future good practice. 'Ecology?' Of course we care about the local environment. 'Sustainability?' It is a crucial component of development strategy. 'Women's rights?' Every development project we assist will have a 'gender' component. 'Income generation?' That's what we're here for, chaps. 'Human rights?' Nothing is closer to our liberal hearts. 'Popular participation?' The whole purpose of development is to empower. 'Corporate responsibility?' We couldn't compete effectively without it. 'Biodiversity?' A speciality of the house.

The list of new corporate virtues lengthens: transparency, good governance, elimination of cronyism and nepotism. It seems the international financial 'community' has undergone a Damascene conversion from trickle-down economics to poverty alleviation.

Repackaging poverty

At first, it appeared that these organisations were absorbing criticism the better to confuse their adversaries. They adopted the language of their radical critics as political camouflage and passed token reforms to appease popular anger. They knew that if they wished to stay the same, they must change a little. But the eagerness of international finance and big business to agree with their opponents has a larger, more sinister purpose. It is a form of linguistic guerrilla warfare, intended to divide 'the enemy' by creating tensions between and among environmental and human rights organisations, reducing the anti-globalisation movement to confusion and incoherence. 'Green capitalism' is a Trojan Horse, dividing nations, and 'moderate' from 'radical' Greens. It conceals the true intentions of the large corporations and financial institutions

and their unchanging, unmodified ideology – a faith in the market has not wavered for an instant.

This ideological and linguistic guerrilla campaign is paying dividends for the transnationals and their political bedfellows. It has been successful in confusing Green NGOs and activists, so that they repeatedly fail to agree a common strategy and work together. It has also revived, amongst vast swathes of public opinion, the idea of anti-globalisation protesters as 'extremist' wreckers. Supporters of globalisation, meanwhile, proceed with a clear ideological agenda. This is the continuing rehabilitation of *laissez faire* economics, a dogma that brought degradation and misery during the Industrial Revolution, as well as famine and destitution to colonised peoples. The re-emergence of this elegantly inhuman doctrine in an enlightened age is problematic. It cannot be shown in its true colours, but must be concealed by a campaign of mis-information. In short, the eco-friendly rhetoric of the transnationals is a form of Green spin.

In 1999, the IMF's 'Structural Adjustment' programme became a 'Poverty Reduction and Growth Facility'. Their 'Policy Framework' papers became 'Poverty Reduction Strategy' papers. Loan and debt relief are the themes, but there is no evidence that any of the IMF's policies have changed. Instead, they have been re-branded in the spirit of the age: monetarism with a human face. In conformity with its fresh image, the IMF declares its role in the UN Conference on Financing for Development at Monterrey next year to be laying the foundations 'for development, including progress on raising living standards for all and eliminating poverty'. The IMF describes itself as part of the global 'workforce' committed to helping all countries 'take advantage of the opportunities of global markets while minimising the risks'.

The *Global Poverty Report*, prepared by World Bank, IMF and regional

development bank officials for the July 2001 summit at Genoa, was an improvement on earlier publications only in its opacity. In reality, it is an argument for more of the same, but the propagandist focus has shifted. Instead of merely demonstrating that 'neo-liberal' economic policies aid business, it purports to show that they help the poor. It concedes that 'globalised markets and the WTO have recently been subjected to strong criticism'. However, it warns that 'from the perspective of the poor, there are risks that justified concerns about their interests are manipulated to support a return to protectionism. This would slow world growth and would likely harm the poorest most'. The new *cri de coeur* of the bankers and G8 leaders is that they are the true liberators of the poor, not the NGOs and disruptive popular movements outside. The medium and long-term opportunities for the world's huddled masses must not be sacrificed because of mere 'transitional' disadvantages, which might wipe out their livelihoods, destroy their communities, herd them into urban slums or turn them into economic migrants and displaced persons. As with all absolutisms, the end justifies the means.

The UK government is as adroit a practitioner of weasel words as any. In December 2000, its *Green Paper on Globalisation* committed the government to 'working with others' to 'manage globalisation so that poverty is systematically reduced and international development targets realised.' The document is a miracle of compressed mendacity. Its strategy for 'managing globalisation' is 'to promote economic growth that is equitable and environmentally sustainable'. Into these last ten words are packed all the contradictions of capitalist development. These contradictions, and the unsuccessful attempt to resolve them, have characterised all discussions of development ever since the Club of Rome report, through Brundtland, the report of the South Commission, the Rio Summit, the Copenhagen Social Summit, the New York Millennium Summit, the Kyoto Protocol and a lengthening list of warnings and wake-up calls of the past four decades. Underlying all these is an

attempt to square the circle: to achieve ecological balance and social justice whilst leaving untouched those structures that create pollution and iniquity.

The paper states: 'The lives of 1.2 billion people are blighted by poverty, and they are robbed of dignity in a world of growing wealth and material plenty.' The target – reducing by half the numbers in abject poverty by 2015 – is endorsed by the World Bank, the IMF, the European Union and the 149 heads of State at the Millennium Summit in New York. There is, we are told, 'an unprecedented international consensus around these targets'. The document acknowledges the 'contested' concept of globalisation. It stresses that Tony Blair's New Labour government does not support the neo-liberal ideology of the 1980s, which was content to 'let inequality rip'. Instead, Blair & Co. are dedicated to 'the equitable management

'The eco-friendly rhetoric of the transnationals is a form of Green spin'

of globalisation'. The inherent injustice of global capitalism is not allowed to spoil New Labour's rosy rhetoric. The paper dwells tenderly upon the 'growing interdependence and interconnectedness' of the modern world, announcing triumphantly that 'Integration' of the world economy has 'accelerated since the Cold War'.

In another pamphlet, Britain's Department for International Development (DfID) appears to make every concession to those who have complained that market monoculture leads to the meltdown of diversity. Poor people, it acknowledges, are especially dependent upon the diversity of natural resources. However the report concludes that 'poverty often forces people to give priority to immediate needs and use resources unsustainably'. In other words, it's the poor that get the blame.

The DfID report makes no mention of the transformation of the magical universe of forests into timber by the logging giants, nor of the violation of

sacred rivers by creating monstrous dams. Instead, it urges that people be given 'incentives for good management'. So, those who have looked after their forests and fields for thousands of years are to be told what to do by urban 'experts'.

Significantly, the regenerated market ideology finds most overt expression in those 'humanitarian' agencies that offer aid, know-how and support to the poor. Even their definition of poverty is suspect. The UNDP defines the wealth of nations solely in terms of income and economic growth, as opposed to quality of life issues like sense of community or ecological balance. In this spirit, the UNDP in 2001 expressed its support for GM foodstuffs as an 'answer' to malnutrition. This in spite of the fact that most hungry people live in countries where there is a surplus of food. The failure of the market to answer hunger is used as an excuse for the introduction of technologies that will

enhance the wealth and power of biotech companies and their shareholders, whilst locking peasant farmers into a new dependency culture. None of these considerations influenced John Prescott, Blair's deputy, when he addressed an OECD-sponsored meeting on biotechnology earlier this year. He told delegates that the

world would eventually support GM crops as their 'tremendous benefits' were 'widely agreed'.

Global capitalism's champions are systematically manipulating language to further their ends. In this, they resemble the more conventional totalitarians of the 20th century. However their approach is subtler, because it is less obviously oppressive. Banks, transnational corporations and their clients in politics and the media adopt the vocabulary of their critics, winning many of them over in the process. They promote an illusory commitment to reform – and a parallel illusion that only they can deliver reform. The use of Green rhetoric by the wielders of power is part of a systematic denial of political and economic choice to the majority of the world's people. It plays upon the hopes and fears of the poor and cynically exploits the idealism of youth.

Jeremy Seabrook's new book, Children of Other Worlds is published by Pluto Press.

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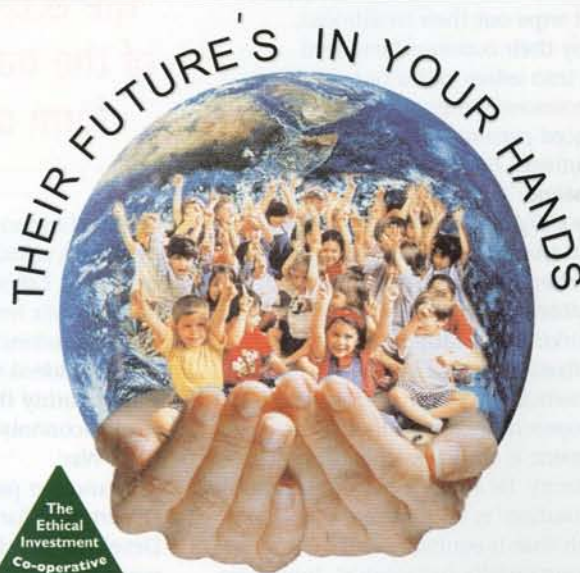
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THE REALITY PRINCIPLE

In the heat of the coming oil shock, writes **David Fleming**, Green ideals will be forged into hard economic truths, as energy crisis devastates the global market.

It's a pity no one in authority listened. The case was made, not least in these pages, for reshaping the market economy intelligently, before the ecosystem took its brutal revenge. Arguments were made for the speedy development of renewable energy, organic agriculture, competent local economies, closed systems and effective means of restraining predatory multinational business. Solutions were invented and refined.

But the opportunity has now passed. The turning-point at which the initiative shifts from the market economy to the ecosystem will be the moment when the world experiences a peak, followed by a downturn, in the supply of oil.

This will occur when the five large OPEC producers in the Middle East – Iran, Iraq, Kuwait, Saudi Arabia and the UAE – are no longer able and willing to pump their oil fast enough to meet the growth in world demand. All the other oil suppliers throughout the world (including the UK's North Sea) are in decline, or too small for any remaining growth in their output to make a difference; global growth in oil supply now depends entirely on the 'Middle East Five', and when they can no longer meet demand, there will be an oil shock. The speed at which it arrives could be startling.

This will mark the beginning of the end of the oil-based market economy, and it is for this moment that we should by now have prepared an infrastructure of renewables, backed by conservation systems to reduce energy demand to less than one third of what we use at present. However, this infrastructure takes a minimum of 25 years to build, and since it has been barely started, the oil famine which can be expected to develop in the next ten years will be catastrophic.

The consequences in the short term cannot be predicted in detail because, when systems break down, they do so chaotically. But some leading symptoms can be foreseen. There will be incremental economic damage, affecting

Third World countries first of all, before becoming more general. This is because the multinational institutions have taken pains to make 'developing' economies dependent on oil, and so when the price of oil rises beyond their means, their economies will start to disintegrate.

Agriculture will be disabled by disruptions in the supply of oil for fertiliser, machinery, irrigation pumps and transport. Tourism will be paralysed by high fuel costs and by a collapse in consumers' income. Political unrest will develop as economic institutions and distribution systems for food and fuel show the strain and begin to break down.

It is now too late to prevent this from happening. Moreover, it is likely that governments, international organisations and transnational corporations will refuse to recognise that there is a problem until they are actually buried in it. Even then, they will insist that more oil exploration or more faith in free market forces will solve it. They will claim that a few wicked hooligans or 'extremists' are stirring up public unrest. Then they will panic. But what about the critics who have been warning about this for so long? What should they do?

Endgames demand new tactics. During this period of transition, it will be necessary to shift the grounds of the ecology-argument decisively forward from ethics to practice. Let me explain. Ethical arguments are relevant in cases where a course of action is possible but undesirable and avoidable. It is possible to produce large quantities of cash crops by means of heavy applications of fertiliser and pesticide, by expropriating subsistence farmers and depleting the soil and drawing on irreplaceable reserves of groundwater – but, of course, there are environmental-humanitarian-ethical arguments against it. In the future, by contrast, such a policy will no longer be possible: there will not be the energy to produce the fertiliser, to drive the machines, the irrigation and the transport, nor the rich-country incomes

to buy the product. There is no doubt that such industrial agriculture is bad, but we will be wasting our time pointing that out. If it is impossible, the ethical argument becomes scarcely relevant.

With oil famine, ethical options become the only way forward. Industrial agriculture? Fantasy. The only option for the future is low-energy organic cultivation, bringing redundant farmers and abandoned fields back into production. Globalisation? This is no more than a short-lived side effect of cheap oil. In the future, local development is the only practical solution. Nuclear energy? Moonshine. To fill the energy gap left by oil and – shortly – by gas, would require some 12,000 nuclear powerstations worldwide which would mean two new nuclear power stations being opened every day indefinitely – well beyond the limits set by logistics, training, safety, waste-disposal and the availability of uranium. A gentle reduction in carbon emissions as a gesture towards slowing the advance of global warming? No chance. The forecasts for the use of oil and gas on which the Kyoto Protocol has been based are far in excess of the quantity that will actually be there to burn. A single currency and bureaucratic regulation by the European Union? Forget it. The euro will break up and the future evolution of currency, along with that of human society, political economy and culture as a whole, will – at last – be firmly located and adapted to specific places.

This does not mean that ethical judgement will become obsolete, but that ethics and practice will converge. The task of building an energy-efficient localised economy at least 25 years too late may well be futile – but there is one good outcome. This time, having explored all alternatives, human society will be forced to do the right thing.

*David Fleming is an independent policy analyst. His book **The Lean Economy** will be published in 2002.*



EUROPE: A NEW 'BIG IDEA'?

The European Union in its present form is structurally incapable of addressing environmental concerns, argues **Caroline Lucas, MEP**.

To many in Europe, 'Big Oil for Bush' seemed to be the main theme of the US presidential election campaign last year. The oil multinationals were one of candidate Bush's chief interest groups and chief sources of funds. Naturally, they will expect President Bush to repay them and there is every indication so far that he intends to do just that. Mr Bush's oil debt, coupled with his growing concern with foreign affairs, will make environmental protection low on his list of priorities. Gale Norton, the US Secretary of the Interior, has in the recent past referred to the 'right to pollute' as a human right, and the rhetoric of anti-green backlash features prominently in the modern Republican Party.

Where does that leave Europe? The trend towards centralisation – and the Commission's posturing as a federal government in waiting – means that the EU often compares itself with the US. Such comparisons take two forms. First, there is a tendency to 'copy' the US, applying US-style solutions to European societies facing very different problems and with very different histories. Secondly, there is the position of smug superiority: 'at least we're better than the Yanks'. On environmental issues, the smug tendency prevails. 'Europe', we are told, deserves the title of world leader on environmental protection. Officials love to bask in facts such as EU air quality, water pollution and vehicle emissions standards being among the most ambitious in the world.

But there is a growing dissonance between ecological concerns, which focus on the human scale and an increasingly centralised, grandiose EU that operates on the principle that large is inevitable, that smaller political units and local economies are outmoded. The failure to advance sustainable economics much beyond the level of good intention is linked to a much wider 'democratic deficit' within the EU.

There is a growing gap between the peoples of Western Europe and the

institutions of Brussels and Strasbourg. Power flows inexorably upwards, away from the nations and regions with which most Europeans identify, towards unelected agencies. Elected bodies, such as the European Parliament, make worthy declarations on the environment and human rights, but EU officials show that when they have to make a choice, their priority is ever-increasing international trade and competitiveness rather than sustainability and ecological economics.

Globalisation and deregulation have created a vicious cycle whereby workers, communities and governments are forced to compete in a worldwide 'race to the bottom' on wages, taxes, and environmental protection. Indeed, competitiveness is seen as the single most important indicator of a society's health. At last year's Lisbon summit, a commitment was made to make the EU the 'most competitive and dynamic knowledge-based economy in the world'. Powerful corporate lobby groups, meeting at the first European Business Summit in Brussels a few months later, delightedly began to map out what this would mean in practice. The titles of some of the workshops indicate their approach: 'Biotechnologies – building consumers' acceptance' was the title of one, whilst another bluntly asked: 'How can the legal and regulatory framework be transformed to better support the capacity of companies to innovate?'

Business leaders in the EU recite three mantras: 'more liberalisation'; 'more privatisation'; 'more deregulation'. Over the past ten years, a wave of mergers and acquisitions has resulted in much greater corporate concentration, blessed by Brussels. In 1997, a record \$384 billion was spent in European mergers, an increase of almost 50 per cent in one year. Economic and Monetary Union – the euro – is encouraging this trend because of its emphasis on standardisation. This suits corporate interests far better than national or local governments planning their own

economic policies to protect their citizens. Some analysts suggest that one in 20 industrial workers could lose their jobs because of mergers and downsizing caused by the single currency.

In 1995, for example, the US-based sportswear producer Reebok had 14 distribution warehouses for its European market; three years later, only 10 remained and after the euro was introduced in 1999, only one distribution centre remained. This trend leads to insecure employment and a massive increase in the ecologically destructive long distance transport of goods. The EU's pursuit of a new round of trade negotiations at the WTO will advance the liberalisation agenda still further.

The origins of the EU lie in the aftermath of the Second World War. Then, the purposes of European co-operation were clear: the promotion of peace and prosperity through free trade and the consolidation of democracy in a Cold War context. These concepts are still presented as 'modern' by many supporters of the EU. In reality, they reflect outdated, 20th-century ideas about progress. A centralised, bureaucratic EU cannot effectively confront the problems thrown up by the new century, such as climatic change, the threat to democracy from multinational business, or the global injustice that is leading to mass migrations of people and the rise of violent fundamentalism across the world. Europe's peoples know this, which is why they are so disillusioned with the EU. Clearly a new 'Big Idea' for Europe is required. For Greens, that idea means a bolder, more ambitious vision for the whole of Europe, both East and West, in which nations and regions reclaim control of their economies and ecosystems. A Green Europe means unity-in-diversity, achieved by popular consent, not centralised uniformity at the behest of corporate power.

Caroline Lucas is the Green Party MEP for South Eastern England.



FANATICISM'S FALLING TOWERS

Recent terrorist atrocities, although horrific,
invite us to question basic assumptions,
argues **Aidan Rankin**.

In the poem above, Eliot does not include New York amongst his roll call of cities, ancient and modern. This is hardly surprising as his epic was written when New York was on the up-and-up, cultural pessimism reigned in Europe and US civilisation's confidence in itself was at a high. His verses, nonetheless, are called to mind by the recent atrocities in New York and Washington. The World Trade Centre's falling towers remind us, horribly, that city-based 'civilisation' is so vulnerable despite its strength. This is because the source of that strength, the concentration of wealth and power, is also the origin of its weakness. When economic and political bastions are in close proximity and controlled by a few individuals or interest groups, they become sitting targets for murderous fanatics.

Such was the case with the act of evil that destroyed the World Trade Centre and took thousands of innocent lives, lives for the most part of functionaries, cogs in a machine: the office proletariat. From the carnage emerged scenes of great bravery and sacrifice – traditional, chivalrous courage that has survived free-market dogma and 'political correctness' to expose the worthlessness of both. The market chaos and the evidence of manipulation of the markets by terrorism's supporters show us how artificial much of our economic system has become. Economics, originally the science of household management, is reduced to number crunching, more a modern superstition than a science. Instead of treating it as the servant of humanity, we allow it to take on a life of its own and become our master. We worship economic forces and markets with a zeal uncomfortably close to religious mania. No wonder that George Soros, who knows a lot about how capitalism works, speaks of a 'market fundamentalism' that poses a threat to social stability and humane values.

In its evocation of falling towers, *The Waste Land* reminds us that history is

not a line of inevitable progress, as the neo-liberal and Marxist thinkers would have us believe. If it has a pattern at all, it is cyclical, a process of rise and fall. Civilisations often decline when they over-reach themselves and underestimate their opponents, or when they lose touch with their founding principles. The value of the ecology movement lies in its critique of modern ideas of progress, its awareness of the limits to growth (economic or political) and its emphasis on the human scale. On these precepts, Greens of socialist or conservative disposition can find common ground. This means, in these troubled times, attempting to bring to political life a sense of humanity and balance, the absence of which aids fundamentalists of all stripes. Aristotle wisely tells us that there are natural limits to the size of states, as there are to the size of plants and animals. This is why, once states reach a certain size, they become non-viable. They develop oppressive bureaucracies and pass an intolerable number of laws as their rulers become paranoid and remote.

In large states, therefore, there is an upward devolution of power, away from 'the people' towards bureaucrats, bankers and CEOs. Globalisation is upward devolution writ large: from governments to big corporations, nation-states to multinational power blocs and cultural diversity to consumerist monoculture. As political and economic units grow larger, the moral basis of government is eroded. Its agencies become inaccessible and lose legitimacy. Enlargement does not produce enlightenment: it creates a culture of mistrust in which extremist movements readily take hold.

Islamic fundamentalism is the most fearsome expression to date of a worldwide upsurge in militant identity politics. Identity-based movements place group loyalty before individual freedom, offer simplistic explanations for complex problems and demonise their opponents as enemies or traitors. Far from being

*'What is that sound high in the air
Murmur of maternal lamentation
Who are the hooded hordes swarming...
What is the city over the mountains
Cracks and reforms and bursts in the violet air
Falling towers
Jerusalem Athens Alexandria
Vienna London
Unreal'*

T.S. Eliot, *The Waste Land*

'reactionary' they show disdain for history, tradition and continuity. Rather than seeking to put the clock back, they seek to impose Utopia. Thus the ideology of radical Islamists has more in common with secular totalitarianisms of the 20th century than with traditional Islam. It distorts beliefs and customs of the Muslim world, as Nazis temporarily distorted German culture or racists distort the concept of nationhood.

Other fundamentalisms do not practise terrorism, but distort ideals and favour force over compromise. The 'Religious Right' invokes Christ's teachings and American values, but shows little compassion and respect for the liberties of others. Feminist fundamentalists vilify women who oppose them, along with a male enemy that includes boys and men. Theirs is a travesty of genuine feminism, which is generous and humane in spirit. Liberal fundamentalists assume that they can set the world free with charters of 'rights' plus 'market reforms'. They are dismayed when their prescriptions are rejected, and angered when their West-knows-best arrogance is denounced as imperialism. Fundamentalist identity politics is the product of globalisation and the confused, fragmented world it creates, a world of intolerable levels of 'communication' but precious little talk.

In *The Waste Land*, the reader is asked: 'What are those roots that clutch, what branches grow/Out of this stony rubbish?' I hope that when our minds are calmer we draw lessons from this curiously symbolic atrocity. We might learn, for example, that grandiose global schemes produce only fundamentalist hatred, not unity. We might also understand that human-scale economics and the diffusion of power can bring us political security, as well as ecological balance. It is by learning such lessons that we may successfully defeat evil.

Aidan Rankin is Comment Editor of *The Ecologist*.

THE PLANE TRUTH

TERRORISTS DON'T NEED NUCLEAR WEAPONS WHEN THERE ARE READY-MADE ATOMIC BOMBS AWAITING DETONATION BY A HIJACKED AIRCRAFT LOADED WITH FUEL. **PETER BUNYARD** EXAMINES THE FACTS.

In early September, on BBC Radio 4's *Commission* programme, Matthew Taylor of the Institute of Public Policy Research asked Nuclear Forum representative, Adrian Ham, whether the electricity supply industry had taken fully into account the implications of a plane loaded with explosives being crashed purposefully into a reactor. Ham reassured Taylor that the reinforced concrete

containment dome over a reactor such as the Sizewell B station in Suffolk, would withstand such an onslaught. Moreover, he stated, if nuclear weapons were involved, why bother to go for a relatively difficult target, such as a reactor, when death and destruction could be more easily wreaked elsewhere?

A few days later, the twin towers of Manhattan's World Trade Centre were destroyed by an explosive force in the region of 1 kilotonne of TNT, equivalent to setting off a small nuclear device.

A week after the attack, nuclear installation giant COGEMA affirmed on its website that, 'the crashing of an airliner on the reprocessing plant at la Hague is highly improbable'. Moreover, it recalled, 'it is forbidden to fly over the area at low altitude'. Forbidden? Well, that's alright then.

British Nuclear Fuels Limited (BNFL) was perhaps a little more realistic: 'The plants are designed to withstand collisions with light aircraft or military planes, but not a commercial jet loaded with aviation fuel. The consequences could be unthinkable.'

Well, we should try to think about them. There's too much at stake not to. At Hiroshima and Nagasaki, several hundred thousand died in the initial blast, and many others succumbed shortly after as a result of infectious diseases to which they had little resistance. Yet, were a reactor to explode, the consequences could far exceed in the long term those resulting from an atomic bomb.



A reactor contains the equivalent of several thousand times the amount of material required to set off a nuclear chain reaction and accumulates in its core all the fission products from the time of start-up. Compare the consequences of Chernobyl with either Hiroshima or Nagasaki. Chernobyl released some 3 per cent of its radioactive material and, apart from contaminating a large swathe of the countryside around the reactor, it sent its various plumes across Europe and the Atlantic. Cumbria will feel the consequences of Chernobyl for a long time to come, as will certain regions in France, Italy, Bavaria, Greece and Corsica which were heavily doused in radioactive fallout. In sharp contrast, neither Hiroshima nor Nagasaki were ever wholly evacuated. On the contrary, both remained lived in and their reconstruction soon followed.

Even so, reprocessing plants such as Sellafield in Cumbria and Cap de la Hague in Normandy are far more vulnerable to attack than nuclear reactors, with consequent destruction several orders of magnitude worse than a Chernobyl. The fission product caesium-137, which emits a powerful gamma rays, and which contaminated Cumbria in the Chernobyl fallout in May 1986, would have a devastating impact on both Britain and France, as well as northern Europe, were it to escape in the atmosphere from either of the two plants.

At both sites, BNFL and COGEMA respectively have imported vast quantities of spent fuel. At la Hague, for example, 7,500 tonnes of spent fuel are stored prior to reprocessing, in actively-cooled storage ponds. Each tonne of

spent fuel contains approximately 1kg of radioactive caesium, in addition to other fission products such as radio-iodine, strontium and cobalt. A recent study by nuclear consultants for WISE, the World Information Service on Energy, indicates that were just one of the four storage ponds at la Hague to release all its caesium, the quantity would be 66.7 times greater than the 27kg released from Chernobyl, with the collective radiation dose likely to lead to a minimum of 1.5 million cancer deaths, plus untold neonatal deaths. Were all storage ponds to fail, then releases of caesium could total 287 times the total that escaped from the stricken Chernobyl reactor in 1986.

Such a catastrophe could occur if the cooling ponds were breached and all back-up systems destroyed, as would undoubtedly happen following the explosion and fireball from the crashing of a large jet laden with fuel. But the ponds are by no means the only threat. High-level radioactive waste, a product of the reprocessing of spent fuel, is also stored as a liquid in special tanks that must be actively cooled and stirred to counter the fierce temperatures generated by radioactive decay. The 1,300m³ of liquid high-level waste, currently stored at Sellafield in 21 above-ground steel tanks, contains more than 2 tonnes of caesium, almost 80 times the amount released from Chernobyl.

The destruction of just one tank, and with it the cooling systems of the other tanks, combined with lethal radioactive contamination of the surroundings, could lead to all tanks boiling dry, with the emission of volatiles such as caesium. 'The initial event could lead ultimately to an atmospheric release from every tank that contains liquid,' says Gordon Thompson, consultant to WISE-Paris.

Such speculation is not idle. An accident every bit as catastrophic as Chernobyl occurred at a Soviet military reprocessing plant in Kyshtym in the Urals in late 1957. A high-level waste tank dried out and exploded, releasing a plume of radioactive fission products. Some 30 villages had to be evacuated and a wide swathe of land cleared of residents. Many died, although the precise number has never been revealed. At the time, and for many years after, the UK Atomic Energy Authority (UKAEA) denied the accident had occurred for fear of a backlash against plans to develop the Windscale site into a massive reprocessing complex. Only after scientists at the US Oak Ridge Laboratory confirmed the nature of the Kyshtym accident were UKAEA scientists, including the then director, Sir John Hill, forced to change their tune.

Both British and French reprocessing plants are storing around 80 tonnes of plutonium isolated from spent nuclear fuel. BNFL is now seeking authorisation to start up its mixed oxide fuel (MOX) fabrication plant, which will use some of the plutonium in lieu of enriched uranium. The running of such a plant adds new risks to the use of nuclear power, since it provides a dangerous justification for reprocessing spent fuel and extracting pure plutonium. Tied in with the use of MOX fuel is the transportation, presumably globally, of fissile material in the form of plutonium, with all its attendant dangers in terms of terrorism and hijacking.

And what of nuclear reactors, with their reinforced concrete containment structures and, in the case of advanced gas reactors (AGRs), 7m-thick pressure vessels. Are they less vulnerable? Unfortunately, the integrity of all reactors, and indeed of the spent fuel in their on-site cooling ponds, depends essentially on their having at all times a source of externally-generated electricity to operate their safety systems,

including the release of their control rods to shut off the reactor in an emergency.

Following the accident at Chernobyl, Lord Marshall, then chairman of the Central Electricity Generating Board, confidently asserted that an accident at a nuclear power station on the scale of Chernobyl 'could never happen here'. In response to that claim, Greenpeace reviewed different reactor systems being used in the West, including UK gas-cooled reactors, which had been dubbed 'benign' in terms of their operation.

At the instigation of Greenpeace, Richard Webb, a nuclear engineer, who was employed by Admiral Rickover for the construction of the Shippingport pressurised-water reactor in 1958 in Pennsylvania, reviewed the safety of AGRs. On applying fundamental neutron-transport equations to the structure and design of the AGR, and asking what would happen were the gas circulators to fail simultaneously as a failure of the reactor to shut down automatically, he discovered the potential for a massive nuclear explosion.

As Webb points out, 'a near full release into the atmosphere of radiation from just one AGR could potentially result in: (a) evacuation and semi-permanent abandonment of about 120,000 sq km of land (more than half the size of Great Britain) due to gamma radiation alone from the nuclear fall-out; (b) permanent abandonment of 120,000 sq km due to plutonium dust fall-out; (c) ruin of food-producing agriculture over 750,000 sq km for about 100 years due to strontium-90 and caesium-137 fall-out; (e) abandonment of 200,000 sq km or more due to the combination of all forms of radiation exposure.

A catastrophe which destroyed all the reactors on site and caused the release of volatile radionuclides from spent fuel would compound the disaster several-fold and, conceivably, would put millions of lives at risk, both from acute radiation and from the insidious development of leukaemia and cancer.

In the event of the power to the gas circulators being suddenly cut off, as through the destruction of the electricity supply to the reactor, then the fuel rods would rapidly overheat. The ceramic-oxide fuel melts at a temperature about 1,000 °C higher than that of the stainless steel cladding. Consequently, within 30 to 40 seconds of the event, the steel would begin to melt and drain off from the hot fuel, a process which leads to a surge in the number of neutrons available to bring about the fissioning of uranium.

With the reaction taking off exponentially, fuel vaporises, leading, according to Webb's calculations, to an even greater surge, as indeed happened during the accident at Chernobyl. The net result would be a massive atomic explosion within the reactor core that would in all probability breach and destroy the pressure vessel.

Any reactor system has its particular vulnerabilities, especially in the face of an explosion such as that which brought down the World Trade Centre. How disturbing, therefore, that the talk in Britain should still be of establishing new nuclear power programmes to replace reactors that will have reached the end of their operational lives over the next 20 years.

And what about the fissile material, such as plutonium or enriched uranium, that is so much part and parcel of any nuclear power programme? That too must be taken into account in considering the risks from well-funded terrorists, or even from hostile governments. Thefts of nuclear material go on apace. Two days before the attacks in the US, the current affairs programme, *Wales on Sunday*, cited the award-winning

series *Y Byd ar Bedwar*, in which the trade in nuclear terror is exposed. Filmed in Pakistan and Russia, the producer, Tweli Griffiths, describes how the authorities in former Soviet Georgia have their job cut out to capture smugglers before they have managed to pass on their lethal cargo to terrorists or regimes such as that of Saddam Hussein in Iraq.

In recent years, some 140 arrests have been made, the latest in August when four people were arrested with 2kg of uranium-235 in their possession, almost enough for a nuclear bomb. And in Europe, between 1992 and 1998, 173 attempted thefts were reported, some involving potential bomb-making material. Meanwhile, the Italian mafia is now actively involved in the illicit transport of nuclear waste from Eastern Europe, and in 1997 was known to have imported more than 100 truckloads of radioactive scrap metal into the Province of Brescia alone. There, the risk is that the radioactive material is added to recycled metal, so dispersing radioactive material far and wide.

In the UK, the government's Energy Review is expected later this year. It will probably advocate a new programme of reactor construction, albeit with provisos concerning radioactive waste disposal. We know that Tony Blair is something of an enthusiast, even if not on the scale of Margaret Thatcher. His Energy Minister, Brian Wilson, is another nuclear aficionado. Let us hope that neither he nor Blair will be so shortsighted as to commit us to further development of a technology that has the capacity – like no other – to make our island virtually uninhabitable.

Peter Bunyard is science editor of *The Ecologist*.

Plane truths

- Some years ago, General Buis declared that even before a shot was fired, a country with a civil nuclear power programme such as France would be impossible to defend. And, in 1991, General Etienne Copel wrote about the grave dangers of suicidal pilots or indeed of missiles being targeted against nuclear reactors. Those military minds were in no doubt that a civil nuclear power programme on the scale now existing in France had unquestionably created unsurpassed vulnerability in a world of suicidal terrorism.
- The idea of targeting a nuclear installation with a civil airliner is not new. In November 1972, hijackers in the US took over a plane with 27 passengers and 4 crew. The hijackers were armed with guns and a hand grenade and they demanded a \$10 million ransom or they would cause the plane to crash on a nuclear reactor at the Oak Ridge National Laboratory. They forced the pilot to make a steep dive towards the reactor, only letting him pull out when the airline agreed to the hijackers' demands.
- Four days after the terrorist attack against the World Trade Centre in 1993, the *New York Times* received a letter in which the Islamic Jihad group threatened an impending attack against nuclear installations. The group had trained the previous November just 15km from the Three Mile Island nuclear power station. Despite the UK Nuclear Forum's assurances, nuclear power stations and their support structures make for obvious civilian targets when the aim is terrorism on a massive scale.

A BREATH OF FRESH AIRES

FROM THE RUBBLE OF ARGENTINA'S ECONOMY IS RISING A NEW BARTERING SYSTEM. AND AS **SUE BRANFORD** DISCOVERS, IT WORKS RATHER WELL.

With a broad grin on her face, Elsa lays out her wares on the trestle table in the large hall: chocolate and walnut cakes, apple tarts, pizzas covered with spicy sausage, and pots of 'dulce de leche' – a kind of soft fudge. 'People like our cooking,' she says confidently, '– you'll see'. At that moment, a voice over the loudspeaker announces the opening of the market. About 300 people, queuing outside in the bitter cold of the Argentine winter, swarm in. And Elsa is right. Within half an hour all the food on her table has disappeared. And a happy Elsa is clutching a bundle of notes.

Interestingly, the notes aren't the legal currency, the peso, but a kind of Monopoly-style money produced by the stallholders themselves. For Elsa works in one of the special barter markets that have mushroomed around the Argentine capital, Buenos Aires. It's estimated that about one million of the city's total population of eight million go to these markets. And it isn't hard to find out why.

'My husband used to work in a cake factory,' says Elsa, as she packs away her empty trays, 'I was just a normal housewife, looking after our two children. But then the factory where my husband worked closed down. For two or three months he tried to get another job. And I looked for work as a shop assistant. But there are so many people hunting for jobs in Argentina today. It was impossible. We were getting desperate. And then one of our neighbours suggested that we started coming to these markets. And I suppose, in a way, we were lucky. My husband's an excellent cook – and I'm not bad myself! So we started selling food, and we've never looked back.'

The stall next to Elsa's belongs to Daniel. He sells pots of tomato sauce for pasta. He waxes eloquent about the quality of his product: 'It's made from an old recipe I learnt from my grandparents who came from Italy. It's really tasty, far better than the sauce you buy in supermarkets.'

Daniel has all the enthusiasm of a recent convert. 'I'm 49 years old', he says. 'I went to university late, after I'd had my six children. I only got my degree in business studies a few years ago. I thought it would help me but it's been no use at all. I got a couple of jobs in factories. But each time, the company closed down just after I'd joined. I was getting desperate, with all these children to bring up.' Once again it was a neighbour who suggested going to the barter market. 'At first I thought I couldn't do it,' he adds. 'I'm a factory administrator, not a cook. What could I make to sell? But then I remembered this sauce. I got the recipe and started. I may not be doing as well as Elsa, but I'm feeding my children.'

Meanwhile, Elsa is off visiting other parts of the market to spend her 'money'. She comes back with a huge basket of food, two warm sweaters, a pair of trousers – and a bathroom cabinet, which she was carrying with difficulty. 'That's for my daughter', she says. 'She's just got married. And we're helping them furnish their flat.'

Daniel pointed to everything that Elsa has gathered. 'See', he says. 'That's what I've been telling you. These markets create wealth. Elsa and her husband spend maybe 20 pesos – around \$20 – on the ingredients for their cakes. And they've produced goods that are worth a lot more. We reckon that, on average, people can triple their incomes by selling at these markets. That's why they're growing so quickly.'

Barter markets aren't something one would expect to find in Argentina, which used to be one of the richest and most sophisticated countries in Latin America. But over the last 30 years, while foreign debt has grown 20-fold, the living standards of most Argentines have actually deteriorated. Worse still, Argentina has become infected by that terrible Latin American disease – income inequality. Whereas in the 1970s about half of the country's gross national product was paid to workers, their share has today fallen to 17 per cent. Income has become concentrated in the hands of a tiny elite, associated with the multinational corporations and foreign banks that have taken over the economy. The industrial base of the economy has been virtually destroyed by a flood of cheap imported goods. Official figures show 18 per cent of the labour force to be out of work.

In these circumstances, the barter markets are becoming a vital survival mechanism for large sectors of the population, and are expanding rapidly into new areas of the economy. People are buying and selling property, purchasing cars, freezers and video recorders, and even paying for their children's education through barter. Perhaps most impressive of all, people are developing strong emotional links with the markets. 'Through barter we are recreating a sense of community', says Daniel. 'That's something our grandparents had. They were terribly poor when they came over from Europe in those crowded, unhygienic ships. And they helped each other build a new life. In recent years, with all this market economics that makes us compete against each other, we've lost that feeling of solidarity. But we're learning again. We don't just come here to make money, but to have fun. We hold barbecues at the weekends. We sing and we dance. It's becoming a way of life.'

For the moment, the barter markets enjoy the passive support of the authorities, which see the markets as a kind of escape valve in the face of the escalating social discontent caused by the economic crisis. But many of the stallholders believe that this could change. 'We're beginning to compete with the supermarkets', says Elsa. 'Sooner or later the authorities will turn against us, accusing us of tax evasion or of lack of hygiene. They'll find something. But we're ready for that. Our great strength is the popular support we enjoy. Look around in this hall. People are chatting to each other and laughing. They're enjoying themselves. You won't see that anywhere else in Buenos Aires today.'

Sue Branford is writing a book with Jan Rocha on Brazil's Landless Movement to be published by the Latin America Bureau in spring 2002.

CAGE RAGE

UNLESS THERE IS AN INQUIRY INTO SEA CAGE FISH FARMING IN SCOTLAND, A PUBLIC BACKLASH MIGHT BLOW IT OUT OF THE WATER. **DON STANIFORD** REPORTS.

In Scotland, 350 sea cage fish farms littered around the Highlands and Islands find themselves in the vanguard of a wave of protest, and under scrutiny by the Scottish Parliament. A petition submitted to the Public Petitions committee in February 2000 called for an independent inquiry into sea cage fish farming. The petition (PE 96) by Allan Berry, of Cannich-by-Beaully near Inverness, accuses the Government of 'regulatory failure' in relation to the expansion of sea cage fish farming.

In what is seen as a test for the 2-year-old Parliament, the Government, in the guise of the Scottish Executive, may be forced to appear in the dock themselves. The last inquiry – 'Fish Farming in the UK' – by the House of Commons Agriculture Select Committee (1989–1990) merely gave salmon farming *carte blanche* to do as it pleased. Over the next decade, production leapt from 30,000 to 130,000 tonnes, leaving a raft of environmental problems in its wake. Now the Scottish Parliament have a final opportunity to rein in the excesses of sea cage fish farming.

Despite cross-party support from the Liberal Democrat leader Charles Kennedy, the Transport and Environment Committee and Rural Development Committee of the Scottish Parliament, the Government's own nature conservation adviser Scottish Natural Heritage, and over 100 supporting individuals and NGOs in 17 different countries, the Scottish Executive have refused to support an inquiry. Given the stench of corruption and contamination coming from salmon farming it is not surprising that the Scottish Executive want to keep a lid on an industry reeling from the illegal use of chemicals, mass mortalities and escapes, toxic algal blooms and damning revelations concerning PCBs and dioxins (see 'The horrors of intensive salmon farming', *The Ecologist Report*, June 2001).

Any inquiry promises to open a can of worms, since many fishermen, shellfish farmers and anglers are beginning to realise that sea cage farming could put them out of business. In April the Association of Scottish Shellfish Growers voted 'for a moratorium on the further expansion of sea cage finfish aquaculture until the outcome of the pending Public Enquiry deems it prudent to do so'. In September, Hamish Morrison of the Scottish Fishermens' Federation marked a sea change in the fishing industry's stance when he pointed out:

'There's a public perception that fish-farming is sustainable, but people overlook the fact that farmed fish are fed on fishmeal products. If we put an extra 400,000 tonnes of farmed cod into the equation it means a requirement for an additional 2 million tonnes of industrial catch. That has to be compared to the "total allowable catch" for industrial fish at present, which is 1.2 million tonnes, so we're talking about almost trebling the pressure on these fisheries. There's no point in talking about a cod recovery plan if there's not enough for them to eat. It's really important that Scottish Parliamentary committees looking at fish farming don't limit

themselves to getting quick headlines about sealice and farm escapes. They have to look at the really big issues like this, the strategic issues.'

Far from being a panacea for the decline in wild fisheries, sea cage fish farming can only compound the current crisis. A paper in *Nature* last year calculated that it takes 3 tonnes of wild fish to produce 1 tonne of farmed salmon (for cod, halibut, haddock and other marine fish this goes up to 5 tonnes). 'It is high time both public and private interests think of these sectors jointly. Without sound ecological practices, the expanding aquaculture industry poses a threat not only to ocean fisheries, but also to itself,' says the author Dr Rosalind Naylor. According to Daniel Pauly, speaking at this year's American Association for the Advancement of Science. 'The new trend in aquaculture is to drain the seas to feed the farms. Meanwhile capture fisheries now focus on what we once considered bait. These two trends – farming up and fishing down the food web – imply massive impacts on marine ecosystems that are clearly unsustainable.' By farming carnivores at the top of the food chain it's a case of robbing Peter to pay Paul. Given the net loss in fisheries resources it is no wonder fishermen feel short-changed.

In June the Research Council of Norway predicted that 'within three to eight years the lack of marine oil raw materials could hinder the growth of Norwegian salmon farming'. A staggering 80 per cent of all fish caught by Norwegian trawlers is already used to provide feed for the fish farming industry and the International Fish Meal and Fish Oil Manufacturers Association (IFOMA) predict that aquaculture may consume 90 per cent of the world's fish oil by 2010. Such a wasteful form of farming is, according to Dr Becky Goldberg of the Environment Defense Fund, 'biological nonsense'. Sadly, common sense is not a currency those financing salmon farming are used to dealing in.

Just as fish oil companies are looking further afield, fishing fleets are sinking to greater depths in search of fish – the new 'blue gold'. Fish oil prices are currently just over 500 dollars per tonne and rising fast. Feed companies are already harvesting sandeels, sprats, capelin, anchovies, herring, mackerel, blue whiting and even looking to exploit krill. Fish feed is being stock-piled by companies who foresee the scarcity of supply, hence the rush towards finding fish substitutes such as vegetable protein, wheat, and soya. Unfortunately, trying to turn a carnivore into a herbivore is farcical. Feeding salmon on seaweed is rather like force-feeding a lion on lentils and veggie burgers.

And since salmon farms use the marine environment as an open sewer, imagine the waste from such an operation. WWF calculated last year that waste discharges from Scottish salmon farms were equivalent to those from 9.4 million people. Considering Scotland's population is only 5.1 million this is hardly a drop in the ocean. Moreover, the flushing rates in sheltered lochs are so slow that the effect is similar to flushing the toilet once a month. The shit may have already hit the fan, with most of the West coast (coincidentally where all the salmon farms are) closed to scallop fishing over the last two years due to the build up of toxic algal blooms. In fact 57 out

of 60 areas closed due to shellfish poisoning in 2000 were in the vicinity of salmon cages.

Whilst the UK Government buries its head in the waste effluent under salmon cages, the Norwegian State Pollution Control Agency admitted in April 2000 that salmon farms were 'now major polluters'. Meanwhile, the Scottish Environment Protection Agency are content to permit salmon farms the use of an arsenal of chemical weapons. Since 1998 they have issued over 500 licences for azamethiphos, cypermethrin, teflubenzuron and emamectin. By comparison, in June this year Norway announced a ban on copper paints used on salmon cages and began re-locating salmon cages from the mouths of salmon rivers. The latter is something the Scottish Office proposed 10 years ago but was shelved due to pressure from the salmon farming industry.

If public accountability and democracy mean anything, the industry must be opened up to transparent investigation and



WWF SCOTLAND

the Government must be held to account over its failure to control the excesses of sea cage fish farming. In what could be a defining moment in the brief history of the Scottish Parliament the decision over whether they can conduct their own inquiry will take place over the coming months.

The Parliament must not allow current problems to fester in a climate of apathy and denial. If the Scottish Government does not conduct an inquiry the public may have no alternative other than to take the matter into their own hands. Over in Canada, the David Suzuki Foundation has taken it upon itself to organise a 'citizens inquiry'. In Chile, NGOs have set up a 'Parliament of the Sea' to debate the future of fish farming. An inquiry would defuse a situation which is at boiling point. As Tom Morton pointed out in *The Scotsman* earlier this year: 'What's the betting somebody starts blowing up cages within the next year? And it wisnae me, officer.'

Don Staniford is a freelance researcher and author of 'The One That Got Away: Marine Salmon Farming in Scotland' published by Friends of the Earth Scotland, June 2001.

To demand a public enquiry write to: Andy Kerr MSP, Transport and Environment Committee, Scottish Parliament, Edinburgh, EH99 1SP; Rhona Brankin, Fisheries Minister, Scottish Parliament, Edinburgh, EH99 1SP.

SELF-IMPOSED SANCTIONS

THE INDIAN POPULATION NEEDS MORE
TRADE BARRIERS TO PREVENT FREE TRADE
STARVATION, SAYS **VANDANA SHIVA**.

In December 2000, Prakash Singh Badal, the Chief Minister of the most prosperous state in the so-called 'breadbasket' of India – Punjab – warned that: 'The implementation of the WTO Agreement [aimed at further trade liberalisation in agriculture] in the present form would lead to bloodshed in the country. For Badal, the 'signing of the WTO amounts to signing the death warrant for the farm sector'.

Today there are 60 million tonnes of surplus grain rotting in government food stores, three times the buffer stock needed for the nation's food security. At the same time, government figures themselves concede that 50 million of the people of India are facing starvation, a figure that is more than double the number of people who died of starvation in the great Bengal Famine of 1942.

India's return to famine

For the first time since that catastrophe created by British imperial free trade policies, famine and starvation have returned to India. All the elements of India's food security policy are today being dismantled under pressure from the WTO and the World Bank. Famine has again returned to Orissa and other parts of the country including Rajasthan, Madhya Pradesh, Maharashtra, Gujarat and Andhra Pradesh. Eight hundred tribal children have died of starvation in Maharashtra. In the famine-stricken regions of Orissa, children are being sold for a few thousand rupees because of starvation. Wives are being sold into bondage.

Food – last century's crop

A major cause of this growing crisis is the shift from food production to cash crops. Since new economic policies were introduced in 1990–91, the area under traditional grains has declined by 18 per cent, whilst the area under non-food cash crops such as cotton and sugar cane has increased by 25 per cent and 10 per cent respectively. In the past three years alone, food production has shrunk by 12.8 million tonnes to 196.1 million tonnes.

This itself is part of a process whereby both the Central and State governments are making a deliberate attempt at dismantling the people's food security system through trade liberalisation and globalisation policies. Other threats include the increasing costs of inputs, particularly due to price deregulation, and falling farm prices caused by the withdrawal of government procurement. The situation has been exacerbated by WTO-induced dumping of imported products from both rich and poor countries, itself made worse by the removal of import restrictions (Quantitative Restrictions, or QRs).

In 2000, the WTO forced India to remove all import restrictions through its ruling in the case on Quantitative Restrictions brought by the US against India. The result was



massive dumping of imported, subsidised commodities. Farm prices, and hence rural incomes, are now falling dramatically as a result of this imposed import liberalisation.

Farmers in the southern state of Kerala have suffered enormously during the year 2000, due to the price drop in major plantation crops such as coconut, rubber, pepper, coffee, tea and cardamom. Prices of coconuts have fallen by 80 per cent, coffee prices by over 60 per cent, pepper prices by 45 per cent. It is, however, in the edible oil sector where domestic production has been hit hardest, as highly subsidised soya and palm oil with low import duty floods the market. In this sector, imports now account for 70 per cent of domestic consumption.

Paradoxically, although in theory such food dumping is an unfair trade practice, it is totally legal under the unfair WTO rules. For example, US soybeans are cheap (\$155 a tonne) not because of cheap production but because of subsidies. This low price is possible because the US government pays \$193 a tonne to US soybean farmers, who would not otherwise be able to stay in production given the low commodity prices. As heavily subsidised US soybeans flooded India's domestic market in 2000, prices crashed by more than two-thirds. The local oil processing industry, from small-scale enterprises to larger mills, started to close down. Domestic oilseed production declined, domestic edible oil prices crashed. Groundnut prices went down by 30 per cent. Meanwhile some farmers protesting against the collapse of their markets were shot and killed.

When agricultural subsidies are \$363 billion in the West, opening up Indian markets is not a matter of competition but a recipe for suicide. However, it isn't just imports from Northern countries that are harming Indian producers. Palm oil imports from Malaysia have also contributed to the devastation of producers in regions such as Kerala.

It is vital to implement an alternative to the trade liberalisation agenda of the WTO that is causing such destruction to food security in India. There are key policies required for world food trade to foster food security and localisation. These include fair trade rather than free trade; maintenance of import controls, ie qualitative restrictions; no imports except to meet genuine scarcity and no imports

■ allowed where prices are below the cost of national production, or that in the country of origin, in order to prevent dumping and the destruction of livelihoods; no export subsidies either hidden or overt and the prevention of trade monopolies; and procurement only by government-controlled entities to ensure fair prices to farmers and consumers rather than low prices to farmers and high prices to consumers.

In order to achieve a genuinely decentralised agenda for food security systems the renegotiation should include fundamental changes to:

1. Agreement on Agriculture (AoA): The negotiations must reject the clauses on Market Access, removal of Quantitative Restrictions on imports and exports and removal of subsidies to farmers and food subsidies for consumers. Quantitative restrictions must be re-imposed on food and agricultural items.
2. Trade-Related Aspects of Intellectual Property Rights (TRIPs): Food security is not possible without the farmers' right to safe seeds. Monopoly intellectual property rights on seeds, plants and other lifeforms threaten farmers' rights to safe seeds and thus endanger food security. They must be banned.
3. Sanitary and Phytosanitary Agreement (SPS): The current dominant interpretation of the Agreement allows the elimination of indigenous safe foods on spurious grounds – such as banning freshly-pressed low-cost, healthy mustard oil, whilst allowing the introduction of hazardous foods – such as genetically engineered soya. Each nation must be able to develop its own national system that meets its national needs for safety.
4. General Agreement on Trade In Services (GATS): Covers food distribution and water by bringing both sectors under services. Thus it allows corporate takeover of essential commodities and vital resources, without which it is not possible to survive. Food and water cannot be brought under GATS and the agreement itself must be reorientated to encourage services for the sustainable provision of basic needs.

In essence the fundamental change required in the world food system involves putting people and nature, not trade, at the centre of food and agricultural policy.

Making the transition

A five year transition is needed to move from the present centralised system to a genuinely decentralised system. To ensure maximum democracy this must evolve thorough democratic discussion among communities about how to achieve local and household food security. The results should be incorporated by the states in their policy for regional food security, and by the government for overall national food security. In the interim period, while states are building capacity, infrastructure and raising resources, the state must continue to be the main procurer of foodgrains in the country to ensure food security.

In 1995, in preparation for the World Food summit, civil society in India had drafted a People's Charter for Food Security in which we had anticipated today's death by starvation and suicides caused by ever more free market food policies. Our demand is as pertinent now as it was then and

will be taken to the second Food Summit, just before the WTO Ministerial Meeting in Doha in November.

At its core we foresee the need to accord special protection to vulnerable communities, particularly in areas where there is danger of takeover of local resources and increasing lack of purchasing power by the poorer sections of society. This will require the protection of the production and market systems that meet local needs and offer local solutions to their livelihood crisis.

However, not everything can be left to attempts to influence and fundamentally change the direction of international fora such as the WTO and FAO. In the face of the growing threat to food security a new domestic imperative is emerging.

Less trade – more control

It is often claimed by proponents of globalisation that WTO trade liberalisation is what democratically elected third world governments crave, and that it must therefore reflect the desires of their people. Yet, in the world's biggest democracy, there are growing calls for the WTO's direction to be reversed and this is being driven particularly by concerns about food security.

In July, a report by the prestigious Delhi-based Centre for the Study of Global Trade Systems and Development identified the import of foreign goods and services without quantitative and tariff restrictions as ruining India's agriculture and industry, and adding to unemployment. It called for more emphasis on domestic investment and protection of domestic employment through the curbing of foreign investment, selective capital controls and higher tariffs.

In September, two former Indian Prime Ministers, Shri VP Singh and Deve Gowda, joined with political parties, trade unions, farmers' organisations, tribals, people's movements and grassroots workers to launch the Indian People's Movement against the WTO.

The Movement opposes trade liberalisation because the import competition it brings is ruining small and cottage industries, as well as medium and large scale ones, and creating unemployment. Worst of all, agriculture, the last bastion of the national economy which provides for the livelihoods of the majority, is facing unprecedented threats. This is due largely to the removal of all quantitative restrictions on imports of agricultural products, on one hand, and impending control by big business of this sector, on the other.

To mount a co-ordinated challenge to this onslaught and prevent its further consolidation and accentuation, the Indian People's Movement against the WTO will be organising a massive rally in New Delhi on 6 November 2001. The rally will give a voice to a sustained mass movement aimed at stopping the government from surrendering India's economic sovereignty and destroying the Indian economy and people's livelihood.

It is time for these international agencies and the Indian government to sense the urgency on the food security and livelihoods front. If they continue to be in their denial mode, and keep repeating the mantra of globalisation and trade liberalisation, processes and events will overtake them. Unfortunately, the reality is that it is the poor who are being sacrificed for a repeat of the cruel free market experiment that created the famine of 1942 and is now doing the same again in the 21st Century.

Dr Vandana Shiva is president of the Delhi-based Research Foundation for Science, Technology and Ecology.

Reviews

Send your suggestions for *Ecologist* reviews to
Jeremy Smith at jeremy@theecologist.org

Under review this month: *Nonviolence for a Change* JustUs Productions (Video) • *Planet Earth: The Latest Weapon of War* Rosalie Bertell • *The Other Davos* François Houtart & François Polet • *Who Owns the Sky?* Peter Barnes • *Stormy Weather: 101 Solutions to Global Climate Change* Guy Dauncey & Patrick Mazza

NONVIOLENCE FOR A CHANGE (VIDEO)

JustUs Productions 2001/£5.00
Nonviolence video, Friends Meeting House, St Giles, Oxford OX1 3LW, or email: justus@gn.apc.org



Just after the attack on the World Trade Centre, I sat down with the philosopher Paula Casal to examine the circumstances under which violence – whether practised by states, dissident groups or individuals – might be morally acceptable. The violence/non-violence debate had been the defining dispute of the anti-globalisation movement. Now, we figured, it was about to become the defining dispute of the early 21st Century, and we wanted the means of navigating the moral minefields opening up around us.

We came up with five broad criteria, all of which have to be met before any kind of violence towards people becomes acceptable. The violence contemplated must be a response to a life and death situation: in which death or grievous bodily harm is threatened by a failure to act.

All other means of achieving your objectives must have been exhausted.

The violence used must be the minimum necessary to achieve your ends. It must have a high likelihood of success. It must reduce, rather than

increase, the sum total of violent conflict.

It's clear that if these criteria are applied, then both the terrorist attack on New York and any attack on Afghanistan would fail the test.

Fighting Hitler more or less passed, though it failed at all times to meet the 'minimum necessary' test (witness the bombing of Dresden). There is a moral argument for violent insurrection in West Papua (where the grip of government is loose), but perhaps rather less so in Tibet, where the chances of success are very low.

To me the criteria suggest that violence during protests in the nominal democracies of the First World is always unacceptable, failing on at least three counts. But this is not to say that violence is never permissible in societies where political closure (ie the termination of all other options) has not been achieved.

Take, for example, the case of an asylum seeker who is just about to be deported to a country in which she is almost certain to be killed. A handful of you are protesting, and you can see that if you were to shove the two immigration officers out of the way and bundle her into a taxi, you could save her life. All five criteria are met: by shoving the officers aside, perhaps even with a fair degree of force, you are reducing the sum total of foreseeable violence.

As the possibilities of violence increase in the world, we need to be sure that we know when its use is and isn't acceptable. Just as importantly, we need to explore all the means by which it can be avoided, to expand, in other words, the range of options whose elimination is required by criterion two. To this end, no better tool has been provided than the moving and remarkable video, *Nonviolence for a Change*.

It is a common misconception that non-violence or pacifism implies

passivity. Violent activists have often characterised pacifists as cannon fodder, easily crushed by the unanswerable force of arms. This video shows how unjust that characterisation is. The people whose lives it follows have developed brave and delightfully creative strategies of subversion.

Ellen Moxley, a tiny, jolly, white-haired Trident Ploughshares campaigner, is shown climbing into Trident's floating research laboratory on Loch Goil and tipping its entire contents (minus the first aid kit) into the sea. It was doubtless partly because of their good humour and gentleness – the non-violence which emanates from every pore – that she and the other avengers were acquitted, despite causing £80,000 worth of damage.

A rally organised by opponents of the Ilisu dam, which the Turkish government is hoping to build with British help, drowning the cultural heartlands of the Kurds, brings Kurdish campaigners together with the villagers who were flooded out of their homes by a similar concrete apocalypse in North Wales. The historical grievance of the Welsh villagers is transformed into a burning and effective passion to prevent the same injustice being visited upon their new friends.

Nonviolence for a Change shows how heat is turned into light: how protest can explain itself, becoming a demonstration in both senses of the word; how fury on both sides can be deflected and slowly turned into mutual respect and even resolution; how training and forethought can incapacitate and shame otherwise violent police, soldiers and security guards.

The world will never be the same again, and we must re-examine our means of mapping and negotiating it. This video is the best compass you can buy.

George Monbiot

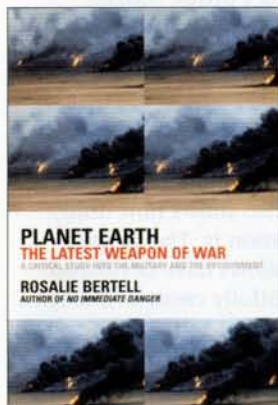
PLANET EARTH: THE LATEST WEAPON OF WAR

A CRITICAL STUDY INTO THE MILITARY AND THE ENVIRONMENT

by Rosalie Bertell

WOMEN'S PRESS 2000/£12.99

ISBN: 0704 344289



Few books could be more relevant, at this time, than this well argued exposé of military developments. In understated, fact-packed prose Dr Bertell reveals that, in the name of security, the West has developed weapons which break the 1976 Convention on Environmental Modification, and could disrupt both the earth's crust and the atmospheric layers which protect life on earth – and that merely testing these weapons may already have done irrevocable environmental damage and killed hundreds of thousands of innocent people.

Moreover, the tragic events in New York have given this book a new, and terrible, relevance. For some of the developments she describes could both be the weapons of choice against terrorists and threaten the future of life on earth.

Bertell is no scaremonger. As a nun, distinguished US scientist, world expert on radiation, and winner of major international awards for science, she is not concerned with politics but with the threat to humanity. Having lead medical commissions to both Chernobyl and Bhopal she has seen the human impact of disasters. Yet she remains coolly incisive as she gives us a catalogue of military projects and experiments which have damaged the environment, showing an ignorance of the interactions of the Earth's life-support systems, and a disregard for both sound science and the future of humanity which beggar belief.

From the use and effects of depleted uranium, through the control of cyberspace, to weapons glamorised by the title 'Star Wars', she gives an extraordinary insight into what is being done in the name of defence – and where it goes wrong.

Her astounding catalogue of harm includes damage to the vital Van Allen belts girdling the earth – which will take hundreds of years to recover; the creation of new electromagnetic belts in the atmosphere – accidentally contaminating the Inuit with caesium 137, disrupting Caribou migration and causing many Inuit to starve to death; and an experiment which is thought to have upset the earth's magnetic field, causing a massive Alaskan earthquake and losing Chile part of its coast.

In addition, Bertell says that, globally, the number of earthquakes a year has more than doubled since the inception of certain weapons, causing a growing number of casualties, and that these experiments may also cause unpredictable weather and accelerate global warming.

She cites the High-frequency Active Auroral Research Programme as a prime example. Though ostensibly a civilian installation, the multimillion dollar Alaskan grid of 180 transmission towers known as 'HAARP' is, Bertell explains, designed to heat sections of the ionosphere until they bulge into a curved 'lens' which will reflect massive energy beams back to earth, destroying selected targets. Yet, she warns that, 'everything in our universe is in dynamic equilibrium and this interference may de-stabilize a system that has established and maintained its own cycle for millions of years' – protecting life on earth.

She adds that HAARP's extremely low frequency waves, directed far into the atmosphere which then reflects back vibrations deep into the earth itself, have been associated with both freak storms and earthquakes. The examples she gives are persuasive.

They include a report by *The Bulletin of the Atomic Scientist* of storms round an ELF wave transmitter, which brought 150–200 times more rain than normal; a Soviet experiment that directly preceded an earthquake in China which killed 650,000 people; and that ELF waves were detected immediately before a San Francisco earthquake in 1989, before earthquakes in Armenia in 1988, before earthquakes in Japan and

California in 1989, and before an earthquake in Los Angeles in 1994. And, tellingly, a devastating Bolivian earthquake, in 1994, originated 24 times deeper than normal.

However, although she does not make much of it, the greatest danger of all may lie in the fact that ELF waves can disrupt the tectonic plates of the earth's crust. This can hardly fail to effect latent volcanoes. Moreover, if tectonic plates are destabilised in an area already poised for disaster, such as California's San Andreas fault, causing California to slide into the sea, the ensuing changes in sea-level would cause global devastation on an almost unimaginable scale.

EcoKids



Acting for Nature gathers together the stories of 15 young people from 11 different countries around the world into a unique collection of environmental histories. Read about Caroline, an 11-year-old English girl who loved owls and convinced the local telephone company to build

'owl boxes' on telephone poles; or

Vincent, who grew up in the slums of Nairobi, and now leads other youngsters on nature walks; or Aishah, a 9-year-old girl from Saudi Arabia, who works to improve the harsh desert habitat that supports the endangered ibex. The stories are, according to Jane Goodall, 'shining examples of what others all over the world can do'. Likewise, David Bellamy said the book, 'demonstrates how each of us can play a part. It is both amazing and inspiring what some young people have achieved.'

Click on the **Acting for Nature** website www.actingenature.org and you will find not only all sorts of information and links pages on the environment, but also the opportunity to email in stories of what you too have done, which will then be posted on the site for people all over the world to read.

Acting for Nature is available from Heyday Books price \$8.95, ISBN: 1890771244.



Incurably addicted to research

EDUARDO GONCALVES REVEALS THE HORRORS OF THE WORRYINGLY RECENT PAST

Yet it seems that HAARP is just one of a growing chain of astonishingly powerful, and potentially interactive, military installations, using varied types of electromagnetic fields or wavelengths, each with a different ability to affect the Earth or its atmosphere, or to disrupt the mind.

These include an installation in Alaska with a magnetic field 60,000 times greater than the earth itself. With typical restraint, she does not guess the possible effects of a magnetic field of that magnitude, but the potential for disastrous effects on the human body and on creatures which rely on energy fields to guide their migration is obvious.

In the light of this book, advocating that the West should not use nuclear weapons against terrorism, may miss the point. For the temptation to use the sledgehammers which Bertell describes may be infinitely greater. From the military standpoint, the beauty of many of these weapons is that their effects can look like acts of God – making them, perhaps, seem ideal tools with which to eradicate fundamentalist terrorists in remote hide-outs. For governments can plead innocence if many thousands of innocents are killed with them.

Yet, however seductive that prospect may be to some politicians, the potential for devastating, and uncontrollable, environmental repercussions means that to suggest that such weapons can foster international security is like suggesting that becoming a suicide bomber increases life expectancy – and, in this instance, we are all in the plane.

It is on a plea for sanity that Bertell ends. For, in the last third of this fascinating, disturbing, and admittedly sometimes disorganised book, she argues that we need to redefine 'security' to mean 'the protection and responsible stewardship of the Earth', and redirect military expenditure towards conflict resolution, social justice and sustainable living. For, as she points out, even when defence projects do not directly threaten the environment and life on earth, they drain economic and environmental resources, cause a 'brain drain' of the very scientists whose brilliance 'could resolve the most serious survival problems now facing the biosphere' and create the deprivation which fosters war.

Bertell concludes: 'I hope this book has given readers some inspiration as

When stories such as last month's revelations (about US experiments on mentally ill patients in Bristol) come to light, the authorities often claim that such barbaric excesses only occurred at the height of the Cold War.

An investigation set up by former US President Bill Clinton reinforces this idea. It was allowed only to look at experiments up to 1974, when supposedly more effective safeguards were introduced to protect US human guinea pigs! Even so, its final report noted that many experiments continue today, including classified trials where consent is not necessarily required...

This month, we travel to a former army camp in New York State. Situated in 5,300 acres of New England, the site is home to a huge laboratory that quietly conducts nuclear research for the government. The Brookhaven National Laboratory (BNL) continues to experiment on human guinea pigs, and one of its current programmes surely goes beyond the definition of 'bizarre'.

As part of a multi-million dollar 'research trial', scientists here have been injecting people with radioactive cocaine – and then doing tests on their brains. The subjects are recruited through classified advertisements in the *Village Voice* newspaper, and include drug addicts, alcoholics, and people with a range of mental illnesses, including Alzheimer's and Parkinson's Disease.

At least 100 human guinea pigs have so far taken part. Schizophrenics have been linked up to a drip containing the drug, which is mixed with a radioactive compound. The scientists have won government approval to administer nuclear chemicals on men as old as 95. In some cases, people are given the narcotic mixture to snort or smoke.

The scientist in charge told me she did not think the experiments were 'particularly' dangerous – although the official approval documents note that a 'potential side effect' of the trial is 'the induction of cancer'.

She conceded that two ER-style paramedics were permanently on hand, because of the constant risk of seizures.

She also claimed the experiments were

to how they might become involved in helping this peaceful planet evolve to its full potential. Despite years of abuse, it is still an amazing and beautiful creation. It deserves our best

simply aimed at a better understanding of addictive behaviour. But why then are records of the experiment's effects kept under lock and key? As official documents confirm: 'All records are confidential and may not be disclosed'.

Inside reports reveal the nervousness of those involved, even before the experiments began. In 1988, they say, came the 'suggestion that the Medical Department become involved in a pilot study with the BNL Chemistry Department on the effects of cocaine use on the brain. This is a very sensitive topic...' No kidding.

Just where did this 'suggestion' come from? 'BNL is not the motivating force on this research', says the report. So who is? 'The majority of the projects are funded by Department of Environment with additional funding obtained from the National Institute on Drug Abuse and from drug companies.' Why so? Apparently, the latter were 'interested in determining receptor occupancy of novel CNS drugs'.

And what of the subjects? The scientists at BNL complained of 'a patient population that is different because of poly-drug abuse, multiple psychiatric diagnosis, and lack of reliability and commitment to the study' (!). The answer? 'There is a continuing need to improve by increasing the number of subjects...'.

Dr Joanna Fowler, who has led the programme, was rewarded in 1998 for her efforts in 'devising innovative ways to attach radioactive isotopes to molecules for research in biology and medicine', although there was little publicity for the prize.

However, you can read about some of her team's exciting exploits in scientific journals. The illuminating accounts on offer include 'Mapping cocaine binding in human and baboon brain *in vivo*', and 'Distribution of 11 C-cocaine in human heart, lungs, liver and adrenals'. Their conclusion? Cocaine can be addictive...

Eduardo Goncalves is a Portuguese investigative journalist.

References on page 66.

efforts. Enjoy it, love it, and save it!

There, she is wrong. The planet will survive. It is humanity which is in jeopardy if such weapons are used.

Moyra Bremner

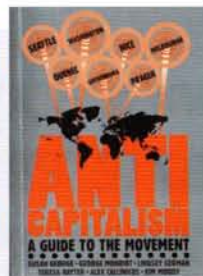
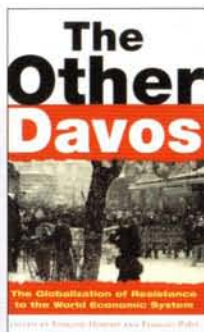
Joining forces

'We are seeing a convergence of struggles, of knowledge, of resistances, of innovations, of minds and hearts for a world of justice and equality, invention and material progress, optimism and spiritual development. We can build this world by seeking and discovering viable alternatives to neoliberalism and unilateral globalisation, alternatives based on the interests of people and respect for national, cultural and religious differences. Now is the time for joining forces.' This quote, from the manifesto of the 1997 World Forum for Alternatives, reappears in **The Other Davos – The Globalization of Resistance to the World Economic System**, edited by François Houtart and François Polet (Zed Books 2001/£12.95, ISBN: 1 85649 988 X). The book opens with an unremittingly harsh series of UNDP statistics exposing the inequalities of our current situation. Take, for example, the fact that, while an additional \$30–40 billion per year from here to the end of the decade would be required to meet basic nutrition, educational and health needs, as well as providing low-cost water, sanitation, obstetric and pediatric care, that figure represents only a quarter of the annual military budget.

From this sobering starting point, the book lays out the discussions that took place in Porto Alegre, Brazil in March 2001, seeking and offering alternative solutions to those being pushed by the World Economic Forum at its annual retreat into the Swiss mountains. As Houtart writes, 'No monolithic programme emerged, no ready-made path, but it was a gathering of popular practical initiatives which are gradually building a new balance of forces, and that means that there is still hope.'

The ideas and arguments presented in *The Other Davos* are superbly complemented in **Anti-Capitalism: a guide to the movement**, edited by Emma Bircham and John Charlton (Bookmarks Publications 2001/£10, ISBN: 1 898876789). Divided into five sections: Issues, Regions, Actors, Events and The Future, this book covers all the pertinent issues, from GM foods to GATS to war, and backs every chapter up with web links to information sources and key organisations relating to each topic. Buy a copy and wonder how you ever did without it.

Where the two books above present a broad overview of the problems facing the world, **Weapons in Space** by Karl Grossman (Seven Stories Press, 2001/£4.99, ISBN: 1583220445) focuses on one of the least understood, and now most relevant. The book and half-hour video documentary expose how the US military really sees space. Put simply, the picture on the right is no joke, it comes from Vision 2020, in



which US space warfare plans are explicitly laid out. It is easily available at www.spacecom.af.mil/usspace (as, disturbingly, is the potential to 'track Santa'). As the attitudes that this picture suggests sink in, bear in mind the following:

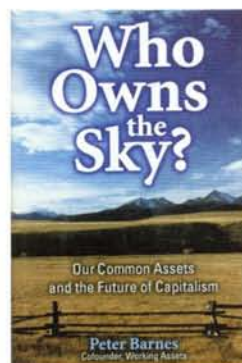
- In 1999, the probe Cassini, carrying 72.3lbs of plutonium whipped by the Earth at 42,300 mph, at a height of 700 miles.
- Had Cassini dipped into the earth's atmosphere it would have broken up, as it had no heat shield, and, according to NASA, the result would have been 'approximately 5 billion of the...world population at the time... could receive 99 per cent or more of the radiation exposure.'
- Five weeks later the Mars Climate Orbiter did crash into Mars, simply because the two teams of Mars Orbiter scientists (one from Nasa, one from Lockheed Martin) were working with different scales of measurement, one imperial, the other metric.
- Bruce Jackson – vice president of corporate strategy at Lockheed Martin, 'the world's biggest arms manufacturer and central to US space warfare preparations' – wrote the Republican Party's foreign policy platform.
- In a *New York Times* article, 'What the World needs now: for globalisation to work, America can't be afraid to act like the almighty superpower that it is', Thomas L Friedman wrote: 'The hidden hand of the market will never work without a hidden fist – McDonald's cannot flourish without McDonnell Douglas, the builder of the F-15. And the hidden fist that keeps the world safe for Silicon Valley's technologies is called the United States Army, Air Force, Navy and Marine Corps.'

To return to the beginning, 'now is the time for joining forces'. Just not these ones.



WHO OWNS THE SKY?

by Peter Barnes
ISLAND PRESS 2001/£19.50
ISBN: 1559638540



The single most remarkable aspect of *Who Owns the Sky?* is the implicit assumption made by author Peter Barnes that the US will somehow summon the will, not to mention the common decency, to sign on to the Kyoto Protocol agreements on greenhouse gas emissions. There is certainly room for skepticism on this point: political conditions in the US today favour disregarding existing treaties, much less signing new ones, if they are not perceived to be in the nation's narrowly defined 'strategic interest'.

Nevertheless, the author, with compelling common sense, suggests that there really is no alternative. Barnes describes an atmosphere that has absorbed as much of industrial civilization's waste products as it can: the US, and the world, will simply have to change their ways. Which leads to the question that really interests him: what then? If greenhouse gases emissions are to be limited, who will get to emit them and who won't? And who decides?

This is a valuable thought exercise for environmentalists, and Barnes comes prepared with a detailed proposal of his own. Although his solution deals only with how the US could fulfill its obligations under the ultimately inadequate Kyoto accord, it could theoretically be applied to lower emissions limits as well.

Barnes's model joins two established US precedents. The first is the payment system established when Alaska's Prudhoe Bay oil fields, located on state-owned land, started producing. This system took the form of a trust held in common by all Alaskans, which collects money from the sale of oil and

distributes it annually, and equally, to the state's citizens.

The second precedent is the 'cap and trade' system that regulates US sulphur emissions. When the connection between these emissions and acid rain was established, a cap was placed on emission levels, and the right to emit was granted via permits which could be traded on the open market.

Who Owns the Sky? joins these models to imagine a 'sky trust', shares of which are held, one each, by all US citizens. The trust would sell permits to emit CO₂ and other greenhouse gases, then distribute the proceeds. For the author, there are two lynchpins to this structure. The vehicle of a trust keeps the proceeds out of the hands of governments, whose stewardship of resources has been less than stellar, and out of corporate hands as well. And the trading of permits on the open market, he believes, would result in the rational use of a scarce resource.

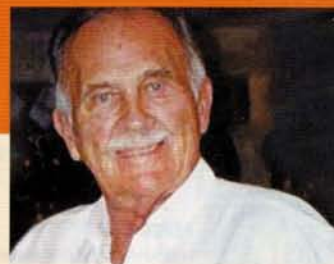
The book's subtitle is 'Our Common Assets and the Future of Capitalism', and proposals for a retooling of the US economic system comprise the second half of the book. With dual pedigrees as businessman (he co-founded Working Assets, the socially-responsible investment company and telephone service) and social thinker (he was recently a senior fellow at Redefining Progress, the San Francisco think-tank), Barnes offers an impressively nuanced analysis of the depredations of capitalism, from the original enclosure of the commons to the inescapable din of modern-day advertising.

Nevertheless, he dismisses any path other than modern free-market capitalism. In fact, a certain dissonance emerges, as the author relies on a simple reconfiguring of market forces to remedy the damage those forces have already done. This fits well with the ubiquitous dogma that has settled over US public policy discussions: government is bad, markets are good, and one-dollar one-vote markets are (somehow) more democratic than democratically elected governments.

Even allowing for healthy cynicism regarding the fallability and corruptibility of governments, this dogma makes for a somewhat constrained debate. On the one hand, government stewardship has often been abysmal, so the creation of non-governmental trusts for preservation of resources is worth pursuing. The best case scenario, as described with conviction in *Who Owns the Sky?*, is the

En Garde...

...AGAINST CONVENTIONAL COMPLACENCY: OPTING FOR SMALLER NUMBERS



For-profit publishers often feel compelled to soft-pedal or withhold uncomfortable truths from their readers, in order to maintain and increase their readership. They erect a wall of silence around unpleasant realities, and if the naked truth emerges, the policy is to be sparing with the facts.

It is well known, for instance, that industrialised nations, with a quarter of the world's population, account for almost three-quarters of its fossil fuel consumption. Carefully presented, this information is not likely to ruffle any feathers. Rather, it makes the reader feel blessed and benevolently paternalistic toward those countries that have not done so well. Provided that is, that the editors refrain from doing the arithmetic and drawing any uncomfortable conclusions.

But *The Ecologist* is different. Its very mission it is to unsettle serenity and shake up the reader's complacency. So let's do the maths. If the rich nations were to cut their consumption by half, while allowing poorer countries to raise theirs to the same level, this would still result in a 50 per cent overall increase in fossil fuel consumption! Contrast this with the 60 per cent decrease the Intergovernmental Panel on Climate Change claims is needed, and it is obvious to even the most obtuse reader that the Earth's carrying capacity has already been strained beyond its limits.

As reported by David Pimental *et al* in the journal *Environment, Development & Sustainability*, eco-damage caused by overpopulation and excessive consumption includes:

- 3 billion humans malnourished worldwide
- 40,000 children dying every day from malnutrition and curable diseases
- more than 10 million hectares of arable land severely degraded or abandoned each year, with a third of the world's arable land lost to urbanisation, highways, salinisation, and soil erosion since 1960
- demand for water already far exceeding available supply in 80 countries worldwide
- per capita irrigation declining since 1978, with grain production steadily shrinking since 1984
- worldwide food production per capita continually declining for the past two decades
- production of fertilisers essential to food production steadily declining since 1989
- annual net loss of forest, equal to an area of at least 12 million hectares (225 square km).

Most of these scary statistics are only reported in environmental journals, but, even in these, discomfort to readers is often minimised by not explicitly spelling out the inescapable conclusion, the need to not only cut the consumption of industrialised nations by half, but also to drastically reduce the number of people doing the

consuming. Fortunately, there is evidence that defenses can be broken down by 'hard pounding' – to borrow a phrase from Wellington. Thus the prestigious US publication *World Watch*, journal of the Worldwatch Institute, in its July/August 2001 issue published an article by Andrew Ferguson of the Optimum Population Trust UK, 'Perceiving the Population Bomb' – a title referring to the wake-up call sounded 33 years earlier by Paul Ehrlich. He convincingly demonstrates that the 'population bomb' exploded in 1940, when world population was about a third of today's 6 billion. In the ensuing six decades we have been overloading the atmosphere with CO₂, with collateral damage steadily accruing in the form of melting glaciers, droughts, floods, and the increasing frequency of the El Niño phenomenon, which has intensified global warming and climatic instability. Quoting from the *World Watch* article: 'It was only in the 1990s that... demographers came to realise that Ehrlich's message was essentially correct.'

In 1991, Clive Pointing's ground-breaking work, *A Green History of the World*, began with these words: 'As some people climb mountains because they are there, others find themselves writing books because they are not there.' And just two years later, the biophysicist Vaclav Smil was to write that: 'We have at least started to realise the enormity of [the] environmental transformation which is imperiling the survival of modern civilisation.' He identified the most critical changes taking place in our planet's condition, and divided them into three main categories, to wit, 'declining availability of critical natural resources, loss of biodiversity, and changing composition of the atmosphere'. It is the latter which makes it possible to establish with some exactitude just when the 'bomb' went off.

In retrospect one is tempted to ask why it took Ehrlich and his fellow ecologists so long – 30 years after the population bomb went off – to sound the alarm. But if they had done so earlier, their message would have fallen on deaf ears. Even today few people are ready to listen to those who, like Edward Goldsmith, founder of *The Ecologist*, have been toiling for decades to awaken their fellow humans to our perilous planetary predicament.

Perhaps HG Wells said it best 50 years ago in *The Outline of History*: 'Human history becomes more and more a race between education and catastrophe.' If we were to substitute 'ecology' for 'education', his sage observation would be even more timely today. And if we keep up the 'hard pounding', maybe someday we shall be able to make complacency meet its Waterloo.

Gard E Binney

Magazine Rack

Worthwhile reads you won't find in the shops



PEACE NEWS

Is an insightful and inspirational quarterly publication campaigning for justice and for a non-violent revolution. The September-November issue is dedicated to children, war and peace. Its topics include child soldiers, school violence and an interview with

Denis Halliday, former UN chief relief co-ordinator to Iraq, and Kathy Kelly joint co-ordinator of Voices of Wilderness.

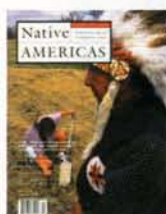
Peace News Ltd., 5 Caledonian Rd. London N1 9DY, UK; tel: +44 (0)207 278 3344.

email: peacenews@gm.apc.org or visit www.gm.apc.org/peacenews

NONVIOLENT ACTIVIST

Is the magazine of the War Resisters League, with a generous on-line version. Asking all the right questions, it reflects on what makes an action non-violent, questions stock investment and is an adamant campaigner against 'Star Wars'.

War Resisters League, 339 Lafayette Street, New York, NY 10012, USA; tel: +1 212 228-0450, email: wrl@warresisters.org or visit www.warresisters.org



NATIVE AMERICAS

Is an award-winning publication that covers critical issues of concern to Native American peoples throughout the Western Hemisphere. Its articles are written by some of today's finest writers on the subject and its fascinating in-depth investigative reports are often inspirational.

Native Americas Journal, c/o

Akwe:kong Press, 450 Caldwell Hall - Cornell University, Ithaca, NY 14853, USA; Tel. +1 607 255-4308, email: nativeamericas@cornell.edu or visit nativeamericas.aip.cornell.edu

NORTHERN LIGHTS

Is the quarterly newsletter of ANPED, the Northern Alliance for Sustainability. The Summer 2001 issue contains lots of valuable information about the preparations for the World Summit on Sustainable Development in September 2002, and ideas on what NGOs should consider and strive towards.

ANEP, PO Box 59030, 1040 KA Amsterdam, The Netherlands. Tel: +31 20 4751742, email: info@anped.org or visit www.anped.org



IKO-FORESTRI NIUS

Is the quarterly Eco-forestry newsletter for and from Papua New Guinea. The August edition focuses on the current state of forest management and its findings are dynamite. The issue gives a great insight into illegal logging practices and the powers at play that distort the true extent of deforestation.

The PNG Eco-Forestry Forum, PO

Box 590, Kimbe, West New Britain Province, Papua New Guinea; email: teff@global.net.pg or visit www.ecoforestry.org.pg

emergence of a 'new commons' independent of the existing public and private sectors.

On the other hand, free markets have provided, in the US in particular, the very engine for environmental damage and skewed use of resources. This, in fact, highlights the flaw in the proposed 'sky trust' mechanism. In the hands of free markets, 'marginal' sectors of the economy will inevitably fail as the supply of carbon-based energy diminishes. Rural economies, family agriculture, and communities in Northern latitudes – among others – would quickly perish if forced to compete dollar-for-dollar with wealthy

sunbelt suburbs. There is reason to think that the social cost of their disappearance would outweigh any harm done by the governmental interference in the market that would be required to prevent it.

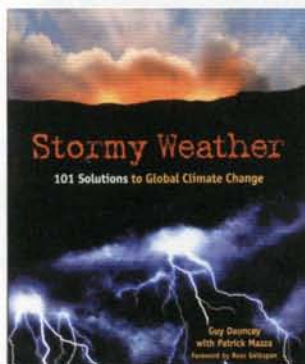
Nonetheless, it would not be inaccurate to characterise *Who Owns the Sky?* as a visionary work. Despite all the foot-dragging and self-serving rhetoric currently in vogue, an historic moment is at hand in the (hopefully) near future as regards global warming. The devil will be in the details, as always, but it is not too soon to start pondering how they will be worked out.

James Terrell

STORMY WEATHER

101 SOLUTIONS TO GLOBAL CLIMATE CHANGE

by Guy Dauncey and Patrick Mazza
New Society Publishers 2001/£14.99
ISBN: 0865714215



Most books on climate change have a strangely defensive tone, a relic of the campaign's Cold War struggle to provide arguments to counter the fossil fuel lobby. Yes, they plead, everyone agrees that there really is a problem; yes, the impacts really will be serious; yes we really really need to do something. Then, a chapter or two tagged on the end with some generalisations about lightbulbs, solar panels and hydrogen cars.

At last, then, this is a book that speaks with true confidence of the need for action. It says just enough about the problems to make a convincing case for urgency, and dedicates the remaining 80 per cent of the book to discussing what we can do about it. The 101 solutions of the title are grouped into ten responses for each of ten different audiences;

individuals; citizens organisations; local government; businesses; energy companies; car companies; regional government; national governments; developing nations; and global. Solution 101 is cutely titled: 'Now – Think!'

The skill of the book lies not just in this structure, which has been tried before, but in its preparedness to give an equal weighting to each audience. This inclusiveness supports one of the books central arguments – that we are all in this together and can only achieve real progress by working at all levels of society. Written for a North American audience the book is remarkable for the quantity and breadth of opportunities it has uncovered, especially at a local level. The US federal government may be corrupted by corporate self-interest, but Europeans often forget the remarkable diversity and creativity of initiatives that thrive at a local and state level.

However, the problem with giving everyone something to like is that you also give them plenty of things to

'The skill of the book lies...
in its preparedness to give an equal
weighting to each audience'

On *Stormy Weather*

dislike. The section on global movements and protest asks, 'did anything major ever change without conflict, struggle, and mass arrests?'. Fair enough. But then, a few chapters on, Solution 40 is eulogising 'natural capitalism' and the liberal free market which leads so many, myself included,

to confrontation.

So, there's a confusion at the heart of the book which is never resolved – it recognises the critique of capitalism, but can never bring itself to admit that the underlying causes of climate change are structural and systemic. In the introduction, Ross Gelbspan says the book is based on a 'critical understanding that there is no dichotomy between a "grassroots" and a "top-down" approach'. This is not a 'critical understanding' – it is a fallacy. In reality, powerful elites and global corporations have a strong interest in extinguishing local autonomy. Local, national, and global interests cannot be isolated and considered separately because their interests are in constant conflict.

The failure to perceive this conflict leads the authors into a somewhat naive confidence in any number of mega-solutions – \$100 billion per year in a Global Climate Fund ('like an environmental Marshall Plan'); a Global Green Deal; a Global Ecological Alliance; a 'Century of Ecological Restoration'; a 'New Apollo Project'. Any 'critical understanding' of climate change should recognise the immense dangers in vesting power and resources on this scale to any global institution.

The book also shows a misplaced enthusiasm for sequestration and carbon trading. 'Go into partnership with a carbon offset organisation,' it urges companies in Solution 35. 'Then you can call your products "carbon neutral" or "climate cool"'. It's a whole new train a-coming down the track'. Actually, it is more like a tidal wave of Greenwash sludge a-coming up the beach. Once again, the authors are undone by their failure to entertain any deeper political critique and their desire to ignore conflicts of interest.

However, such criticisms seem churlish when one considers the biggest achievement of this book – it works. It is pleasant to handle, a joy to look at, and very accessible. It gives people a taste of a wide range of ideas then invites them to explore further. There is a table of websites on every second page, and links to every reference at the book's website: www.earthfuture.com/stormyweather.

In short – this book is a very important contribution to the literature on global climate change, for the simple reason that people will actually read it and use it.

George Marshall

Philanthropy or Villain-trophy?

Everyone loves a winner. Giving is receiving. There's one born every minute. We are all resigned to chemical companies investing in chemistry graduates and sportswear companies sponsoring sports events, but when they start getting their paws onto all manner of seemingly unrelated literary competitions, community scholarships, and environmental prizes, you have to start asking, are we getting our just awards?



Starting this month, we'll keep you updated on what corporate re-sponsor-bility really means.

1. NATIONAL TREE WEEK

This seemingly noble venture takes place this month, with the aim of encouraging the future generation to get out and plant trees. Last year the event was so successful that over 20,000 children took part, setting a world record by planting 107,781 new trees.

The problem is that National Tree Week is sponsored by ExxonMobil. Think about it for a minute. If Exxon can get all the children in the world planting lots of trees for them, it increases the area of carbon sinks, and means Exxon can keep pumping out those fossil fuels. The website www.nationaltreeweek.com even has a game where children can 'help Conkeror to conquer the baddies and plant more trees'. Needless to say CEO Lee Raymond is not a target.

2. GOING FASTER – BUT WHERE?

This is a writing competition dedicated to 'the theme of mobility and the sustainability of 21st-century travel'. Entrants are expected to discuss, 'how mass mobility will affect society, politics, commerce, technology, culture or the world's environment.' Note the 'or' before environment.

Is it really possible to write an article about sustainability without discussing how it will affect the environment?

You'd better ask Shell, as it is they, along with *The Economist*, who are running, and judging, the competition. See if you get to the shortlist with a piece on the recent oil spill from a Shell pipeline in Ogbodo, Nigeria, which destroyed the locals' only source of drinking water. You could also mention the study commissioned by the CIA that found that at least 100,000 barrels of oil were spilled in 1997 and 1998 in the Niger Delta, where Shell is the largest producer.

3. THE NATURAL WORLD PRIZE

The Natural World Prize 'aims to encourage and reward writing which promotes the understanding and conservation of wildlife and the natural environment'. It is sponsored by BP. Amazingly, none of the shortlist is critical of BP's intentions to (sustainably, no doubt) drill the Arctic National Wildlife Refuge.

4. CHEVRON CONSERVATION AWARDS

These are apparently the 'oldest, most distinguished conservation awards program' in the US. Commenting upon the 'unsung heroes' who make up this year's winners Chevron's vice president undoubtedly spoke for the whole oil industry when he said, 'These outstanding individuals and organisations demonstrate a tenacious commitment to preserving our natural heritage. Their passion, ingenuity and vision are as inspiring as their enduring environmental contributions.' Such heartfelt humanity has apparently earned Chevron 'a reputation as an industry leader in environmental responsibility'. So committed is the company that 'responsibility is not only corporate policy, it is the guiding ethic of the people who are Chevron'. That same 'ethic' guided members of the military in Nigeria in 1998 to open fire from Chevron-operated helicopters on demonstrators conducting a nonviolent occupation of Chevron's Parabe Offshore Platform. The 100 Ilaje protesters were protesting against the pollution of their land and water.

5. EARTH DAY

Earth Day is an annual festival that takes place across the US, organised by a corporation that is 'committed to developing unique solutions that make communities around the world better places to live and work.' That corporation is Enron. Making 'better places' includes such noble and necessary projects as removing 'invasive ivy, bamboo and blackberries' from a park in Oregon last year. Which, in terms of 'making the world better' far outweighs any damage caused by the largest power plant in the world, the Dabhol Power project in India. According to Human Rights Watch, 'The Dabhol Power Corporation and its parent company, Enron, are complicit in human rights violations. Enron's local entity, the Dabhol Power Corp benefited directly from an official policy of suppressing dissent through misuse of the law, harassment of anti-Enron protest leaders and prominent environmental activists, and police practices ranging from arbitrary to brutal'.

THE Exchange

The Exchange is a noticeboard for environmental and ethical services and needs, open to all. Entries are FREE for individuals and NGOs, charities and campaign groups. For businesses and educational institutions, the cost is £54 per listing, including a year's free subscription to the magazine. Repeat listings are £20 per issue, £10 extra for a boxed ad. Please send entries – no more than 40 words long – together with cheques where necessary made payable to *The Ecologist*, to Sally Snow, The Ecologist, Unit 18, Chelsea Wharf, 15 Lots Road, London SW10 0QJ, or email sally@theecologist.org. For more information, call Sally on +44 (0)20 7351 3578. Free listings are allocated first-come first-served, and we reserve the right to refuse any entry. *The Ecologist* does not necessarily endorse the products, organisations or services listed.

APPEALS

Wanted – Publisher/funding for spiritual/ecological fiction book, *Ecobears – Paws for the Planet*. 'A true understanding of the sacred *Ecobear* book of Knowledge will allow an ecobear to be trusted with the maintenance of the precious hemp-free vines.' Telephone +44 (0)113 253 6654.

WANTED – YOUNG ENVIRONMENT CHAMPIONS!

The hunt is on to find the UK's most environment and wildlife friendly youngsters – who have helped to make a difference in their local area. There will be ten regional finalists who will win a prize of £500 and the opportunity to go forward and win the cash prize of £2,500. The closing date for entries is 28 February 2002. Entry forms can be found on-line at www.stwater.co.uk or send a SAE, stamped to the value of 27p, to Young Environmental Champion of the Year, The Wildlife Trusts, The Kiln, Waterside, Mather Road, Newark, NG24 1WT.

Help Nigeria Earth First! We need funding, resource materials, video tapes etc. We need your solidarity. Please write to us at: Clegona Centre, 3 Idiado Street, off Artillery Road, PO Box 894, Benin City, Nigeria, or email: environmentalrescue@yahoo.co.uk.

Corporate Watch is a not-for-profit research organisation working to expose the environmental and social impacts of transnational corporations. You can help us – we rely on a tiny funding base, of which donations from individuals form a significant part. Visit: www.corporatewatch.org.uk.

Community Right Initiative (CORI) works for women, youths, torture victims, refugees and the

poor in rural communities in the Niger Delta. We desperately need computers, printers, photocopiers, scanners, fax machines, digital cameras etc. Email: crightsinitiative@yahoo.com.

CALL FOR PAPERS

Intellectual property laws affect us greatly. Visit www.wipout.net where you can submit essays or shorter pieces stating what intellectual property means to you.

Air Pollution 2002. International conference on Modelling, Monitoring and Management of Air Pollution. Segovia, Spain. Paper deadline: 5 February 2002. Conference date: 1–3 July 2002. Website:

www.wessex.ac.uk/conferences/2002/air02/index.html.

Brownfields 2002. International conference on Prevention, Assessment, Rehabilitation and Development of Brownfields Sites. Cadiz, Spain. Paper deadline: 23 April. Conference date: 2–4 September. Website:

www.wessex.ac.uk/conferences/2002/brownfields02/index.html

Waste Management 2002. International conference on Waste Management and the Environment. Cadiz, Spain. Paper deadline: 23 April 2002. Conference date: 4–6 September. Website:

www.wessex.ac.uk/conferences/2002/waste02/omdex/html

CAMPAIGNS

Are you aware of the serious environmental and social problems that current methods of tiger prawn and shrimp farming can cause? Visit: www.shrimpaction.org.

BUY NOTHING DAY 2001.

23 November (Canada/USA), see www.adbusters.org. 24 November

(UK/Europe). See www.buynothingday.co.uk or email info@buynothingday.co.uk.

If you are fighting a clinical waste burner or know of anyone who is (in the UK), could you give me their contact number/address/email. Ralph Ryder, Communities Against Toxics, PO Box 29, Ellesmere Port, Cheshire, CH66 3TX; email: ralph.ryder@communities-against-toxics.org.uk, tel/fax: +44 (0)151 339 5473.

The Fate of the Countryside is in your Hands! Do we want soulless agricultural prairies devoid of wildlife interspersed with golf courses, second homes and theme parks? For more information contact Action on Industrial Agriculture at: agriculture@yahoo.com.

11 years of sanctions: 11 days of action. 20–30 November. Events include a phone-in to the Foreign Office, buying and selling of sanctions-breaking dates and a public meeting in London. Contact: Voices in the Wilderness UK, telephone: +44 (0)845 458 2564; email: voices@vivuk.freemove.co.uk; website: www.vivuk.freemove.co.uk.

TRIDENT PLOUGHSHARES IS COMING TO LONDON where the capital responsibility for TRIDENT resides and where we will non-violently confront the Government. Come and join us. Friday 16 November – individual lobbying of MPs (daytime). Saturday 17 September – Ploughshares, Gandhi and Protest – an open discussion at Kingsley Hall, London. Sunday 18 November – Vigil outside Westminster Abbey (10.30am–1.00 pm). Monday 19 November – Individual lobbying of MPs (am) and Silent Vigil in Parliament Square (2pm–4pm). Enquiries or suggestions for participation are warmly welcome, please contact Sue Davis on +44(0)208 981 6871, email: suedavis@care4free.net or write: c/o 88 Antill Road, London E3 5BP.

COURSES

Environmental Law Foundation Training Seminars. A series of seminars on a variety of matters relating to environmental law including Human Rights, Waste and Sentencing. Courses run until 23 November 2001. Please telephone +44 (0)20 7404 1030 or email: info@elflaw.org.

'Learning in a Global Society', a powerful residential course to help you develop facilitation skills and create effective learning about global issues. In London 26–8 October, 23–5 November and 18–20 January. Repeated in Manchester in 2002. Funded by the EU: fee £250–£500 (depending on status). Details from Development Education Association. For more details, telephone +44 (0)20 7490 8108; email: dea@dea.org.uk.

Introduction to Renewable Energy, Weekend Course, Wales. 16–18 November, Centre of Continuing Education, University of Wales, Aberystwyth. This is an ideal way to learn about the nuts and bolts of this increasingly important range of technologies. Visit the Green Dragon Energy website at www.greendragonenergy.co.uk For information on the course, telephone +44 (0)1974 821564 or dragonrg@talk21.com.

DIARY DATES

25 October, Newcastle, UK
Environmental digest. A commercial overview of environmental issues. Examining what SMEs should consider when looking at improving environmental performance. Covering legislation, energy, waste and health and safety. Contact the Greening the Supply Chain Project, Newcastle City Council, City Works Directorate, Avison Street Depot, Newcastle-upon-Tyne, NE4 5DX. Tel: 0191 277 3787; Fax: 0191 277 3788; email: gtsc.project@newcastle.gov.uk

Corporate Watch

In-depth profiles of major corporations, news updates, corporate information search facility, DIY research guide... everything you need to know about corporations and campaigning against corporations. Online at:

www.corporatewatch.org.uk

DTE

Down to Earth
International Campaign
for Ecological Justice
in Indonesia

Find out more about our campaigns at www.gn.apc.org/dte

For news and campaigns on the environment, land, development, indigenous rights and multi-national investment projects in Indonesia, Aceh and West Papua, read our quarterly newsletter, *Down to Earth*

For a free trial copy contact dte@gn.apc.org or write to 59 Athenlay Road, London SE15 3EN

October/November, Bristol, UK

WILD TALK@WILDWALK Come and hear the biggest names in science discussing the latest scientific and environmental thinking about biodiversity and the variety of life on Earth.

23 October: **Voices from the past: lessons about biodiversity from the fossil record.**

Speaker: Professor Michael Benton, Bristol University.

30 October: **The role of the media in raising awareness of biodiversity.** Speaker Alastair Fothergill, Executive Producer of The Blue Planet.

6 November: **The importance of flagship species in conservation: the plight of the great apes.** Speaker: Ian Redmond, Chairman of the Ape Alliance.

13 November: **Plant biodiversity.** Speaker Professor Peter Crane, Director of Royal Botanic Gardens, Kew.

20 November: **Panel debate: Biodiversity in the UK: the future.** Chair: Jonathan Dimbleby. Each event takes place at 7.30 pm in the IMAX Theatre. Tickets from: Dr David Hill, University of Bristol, School of Biological Sciences, Woodland Road, Bristol, BS8 1UG. Tel: 0117 928 9035 or send cheque payable to University of Bristol. Please enclose a SAE.

29 October-9 November, Marrakech, MOROCCO
COP7 and 15 Session of the Subsidiary Bodies (SBI and SBSTA) UN Framework Convention on Climate Change. Contact: UNFCCC Secretariat, PO Box 260 124, D-53153 Bonn, Germany; telephone +49 228 815 1000; email: secretariat@unfccc.int or visit www.unfccc.int

30 October, Torquay, UK

Climate Change and Tourism in the South West: A Business Orientated Workshop. This is just one of a series of free workshops being held by Centre for Climate Change Impact Forecasting throughout the region. To find out more call C-Cliff on +44 (0)1752 2333304 or logon to www.c-cliff.co.uk.

30 October-5 November, Sandown Racecourse, UK
COPEX – the Contingency Operations & Procurement Exhibition – has a history of being exposed as a market place for instruments of human rights abuses and torture. To get involved, contact the Campaign Against Arms Trade (CAAT) on +44 (0)207 281 0297

1-4 November, Denver, Colorado, USA

World Congress for a Hydrogen Economy. Organised by www.hydrogennow.org and www.millennium-energy.net the purpose is to develop awareness of hydrogen as a key to preserving the environment and maintaining a strong prosperous economy.

5-9 November, Rome, ITALY?

The World Food Summit: Five Years Later. It might move location but it's not likely to be postponed. For more information and updates, visit www.fao.org/worldfoodsummit or call +39 06 570 55249

5-11 November, UK

Landmine Action Week. With a UN conference on weaponry being held in December, this action week hopes to raise awareness and encourage people to get involved. Contact Rosy on +44 (0)207 820 0222 to get your campaign pack.

6-10 November, New Delhi, INDIA

Global Conference on Environmental Education. Organised in association with the

Friedrich Ebert Stiftung, the conference will focus on Rio+10; topics include climate change, global warming and education. Contact the Indian Environmental Society, U-112, 3rd floor, Vidhata House, Vikas Marg, Shakarpur, Delhi 110092; email: iesenro@dels.vsnl.net.in.

7-9 November, Accra, GHANA

International Forum on National Sustainable Development Strategies.

Organised by the UN Division for Sustainable Development. Visit:

www.un.org/esa/sustdev/decmake1.htm.

8 November and 6 December, London, UK
Conway Hall, 25 Red Lion Square, London WC1.
7-9.30 pm. 'When I make myself known', lectures by Benjamin Creme on the emergence of Maitreya, the World Teacher. Admission free.

8-9 November, Washington DC, USA

Criminal Enforcement of Environmental Law. Contact: +1 800 253 6397.

9 November, London, UK

Socially Responsible Investment for European institutional fund managers. The market for SRI is expanding beyond the niche 'ethical' funds to embrace conventional funds that wish to widen the assessment criteria used to make stock selections. Why is this happening? To register or to request more information, contact lindy.bird@cadogan-conf.co.uk or telephone +44 (0)20 7336 8710.

9-13 November, Doha, QATAR

4th WTO Ministerial Conference. For more information, see www.wto.org or www.citizen.org or telephone +41 22 739 5111.

10 November, Bristol, UK

West Country Activist Gathering. St Werburghs Community Centre, Hurley Road, Bristol. 10am-6pm. £3 donation. Let's Localise Resistance! The venue has full disabled access. No dogs. No alcohol. No hierarchies. West Country Activist, Box 2, 82 Colston Street, Bristol, BS1 5BB; email: Westcountryactivist@yahoo.co.uk; website: www.geocities.com/westcountryactivist

12-13 November, London, UK

Equity for a Small Planet. An International Forum on the World Summit on Sustainable Development 2002, organised by the International Institute for Environment and Development. Visit: www.iiied.org/wssd/meetings.html or call +44 (0)207 3882117.

12-16 November, Montreal, CANADA

7th Meeting of the CBD's **Subsidiary Body for Scientific, Technical and Technological Advice** (SBSTTA-7). Contact: CBD Secretariat, Montreal, Canada. Tel: +1 514 288 2220; fax: +1 514 288 6588; email: secretariat@biodiv.org; website: www.biodiv.org.

12-16 November 2001, Caracas, VENEZUELA.

Workshop on Risk Monitoring and Public Perception of Biotechnology. Focus on biosafety and risk assessment, risk monitoring of GMOs and public perception of biotechnology. Contact: Efraim Salazar Yamarte, Centro Nacional de Investigaciones Agropecuarias (CENIAP), Venezuela. Tel: +58 43 471066; email: efra63@hotmail.com

13 November, Sheffield, UK

Rural Shadows

Conference convened by Derwent Rural Counselling Service. Cliff College, Calver, Hope Valley. Enabling health professionals and others working in rural communities to meet and share ideas and information. To book a place, or for more details, contact: Yvonne Bunting, telephone +44 (0) 1629 812 710.

14 November, New Lanark, Scotland, UK

Planning our Forests with People. Hosted by Institute of Chartered Foresters and Forestry Commission. Open to members and non-members of the ICF. For further details and an application form telephone +44 (0)131 225 2705.

14 November, Devon, UK

The Future of Agriculture. Fifth Annual Offwell Lecture, to be given by Anthony Gibson, South West Regional director of the NFU. 7.30 pm, Mackarness Hall, High Street, Honiton. Organised by Offwell Environment Link, telephone +44 (0)1404 831375.

14-17 November, Nagahama, JAPAN

Enviro-Shiga 2001. Exhibition on water conservation, renewable energy, waste reusing

and recycling. Contact: Shiga Environmental Business Exhibition Association. Tel: 81 77 528 3793; fax: 81 77 528 4876; visit www.pref.shiga.jp/event/messe/index.htm.

15 November, Milton Keynes, UK

Institute of Chartered Foresters Eastern England Regional Group. Forest Research Update. Marston Vale Community forest, nr Milton Keynes. Details from Mr A Riley, telephone +44 (0)118 9303132.

17-18 November, London, UK.

The Royal Geographical Society will host **EXPLORE 2001.** The place to find inspiration, contacts and practical advice needed to successfully plan scientific field research and adventurous expeditions overseas. For details, visit www.rgs.org/eac; email eac@rgs.org or telephone +44 (0)20 7591 3030.

19 November-2 December, Montreal, CANADA

1st Intergovernmental Meeting on the Implementation of the Global Programme of Action (GPA) for the Protection of the Marine Environment. Contact UNEP/GPA Co-ordination Office, PO Box 16227, 2500 BE, The Hague, The Netherlands, or visit www.gpa.unep.org

Questions & Answers

Ever wanted to know how much it would cost to convert your home to solar power? Or what sweatshop conditions are really like, and which companies use them? Just send us any question you have, we'll post it here and on our website, and then aim to put whoever thinks they know the answer in touch with you. Send your questions and answers to Sally Snow, *The Ecologist*, Unit 18, Chelsea Wharf, 15 Lots Road, London SW10 0QJ, or email sally@theecologist.org.

Last month J Dangar asked...

'I am planning to build a self-composting toilet on my smallholding. Are there any chemicals currently on the market that I will be able to use in this before using the resulting sludge to fertilise vegetables?'

...and the Permaculture Association suggested:

'There is no need to use any chemical product in a self-composting toilet. All that's needed is a supply of wood ash, sawdust and water. There are several books on the market – a good source is the Centre for Alternative Technology (Centre for Alternative Technology, Machynlleth, Powys SY20 9AZ, UK, tel: +44 (0)1654 705 950, web: www.cat.org.uk).'

This is supported by Martin Walker, who reminds us that:

'Chemical use should be avoided at all costs. Just read the labels for the potential horror stories, "Harmful by inhalation, skin contact and if swallowed", "Avoid discharge of neat product into water courses", "May cause harm to aquatic life in neat form" among many others.'

And this month's eco-enquiries are...

I am looking for an eco way to make my own household products like washing-up liquid, toilet cleaners and so on. Please email me at twowheexpress@iol.ie All advice and contributions will be gratefully received.

Eco Girl

Does anyone know if the 'Safer' brand of pesticide sprays are part of the Monsanto company. I am particularly interested because an organic magazine to which I subscribe carried an ad for Victor Poison Free which is a 'Safer' brand.

Livia McRee

We read about the tragic deaths from variant CJD in the UK. Have there been cases recorded outside the UK?

G Massey

20 November, London, UK

Bridging the Gap. A high profile panel including the Rt Hon Michael Meacher MP, Sir Crispin Tickell and George Monbiot will debate the need for greater collaboration between the corporate and environmental NGO sector. For further information, contact Lis Williams, telephone: +44 (0)1628 534 011; email: lisw@ecoedge.co.uk

21 November, London, UK

Environmental Law Foundation presents **Environmental Question Time.** Keynote speaker: Michael Meacher MP, other panelists include Patrick Holden (Soil Association), Ric Navarro (Environment Agency). Please telephone 020 7404 1030 or email: info@elflaw.org.

25 November–2 December, Adelaide, AUSTRALIA

Solar World Congress of The International Solar Energy Society. Contact: ISES 2001, c/o Hartley Management Group Pty Ltd. Tel: +61 8 8363 4399; email: ises2001@hartley.mgt.com.au; visit www.unisa.edu.au/ises2001congress/home.html

26–30 November, Abuja, NIGERIA

Leon H Sullivan Summit (formerly African-American Summit) The Summit Resource Advisory Committee include Chevron, Coca-Cola, Dow Chemical, Texaco, General Motors etc. For more information visit www.thesummit.org or telephone +800 835 3530.

27–29 November, Phnom Penh, CAMBODIA

2002 World Summit on Sustainable Development Regional Preparatory Meeting – Asia and Pacific Region. Contact: Hiroko Morita-Lou, DESA, New York. Tel: +1 212 963 8813; email: morita-lou@un.org; website: www.johnnesburgsummit.org/.

27–30 November, Cotonou & Quidah, Republic of Benin, AFRICA

South-South Conference. Friends of the Earth International, Third World Studies Institute and the Southern Peoples Ecological Debt Creditors Alliance are organising this conference. Expected to be attended by more than 100 individuals, organisation, governments and other key players from the South and North. For more information visit www.foei.org.

28 November, London, UK

The Natural History Museum's Annual Science Lecture by Lord May of Oxford, 7.30 pm. Tickets £13 adult, £11 concessions, £10

NHM Members. Box Office telephone +44 (0)20 7942 5555 (10am–4pm).

7/8 December, London, UK

World Fair 2001. Conway Hall, Red Lion Square, London WC1. Sell your wares and promote fair trade. For details, contact Alex Burrow, 2nd Floor, CILR Building, Canonbury Yard, 190a New North Road, London N1 7BJ; tel: +44(0)20 7354 4231.

12 December, London, UK

Local Government Association Conference. Flood and coastal defence – which way forward for local government? For further information, contact Ciara Magee, telephone +44(0)20 7664 3044. Visit the LGA's website www.lga.gov.uk for the latest updates on key developments in local government.

26–27 January 2002, London, UK

Therapy Training Fair, Bonnington Hotel, 92 Southampton Row, London WC1B 4BH. Information on counselling, psychotherapy, complementary medicine. For information or for a catalogue, contact Brainwave, 239 Balham High Road, London SW17 7BE.

ECOBAYS

Sunstoves for Everyone. See our website www.sungravity.com for information and photographs of the moulded unit or drawings and specifications for the Sunstove that you can build in your own country.

Feminine Hygiene and the environment – it's a bloody disgrace. The companies that profit from menstruation are profit-driven global polluters. British women spend over £300m per annum. The Perfect Solution – The Keeper Menstrual Cup – has over 4,000 satisfied UK users. Visit www.menses.co.uk.

Farmers' Markets enable local producers to sell their own produce to local people at a realistic price. The National Association of Farmers' Markets exists to promote the sustainability of existing markets and assist in the setting up of new ones. To find out where your nearest market is, send a large sae to NAFM, South Vaults, Green Park Station, Bath, BA1 1JB or visit www.farmersmarkets.net.

Emmaus is a national charity offering homeless people long-term work and accommodation. They raise funds by refurbishing and recycling donated goods, saving approximately 3,000

tonnes of waste from domestic tips every year. To find out where your nearest branch is, visit www.emmaus.org.uk.

HOLIDAYS

The Hawaii Ecotourism site. Your Guide to the Path Less Travelled. For more information, please visit alternative-hawaii.com.

How about a holiday with a difference?

Farmers' World Network is organising a tour of Costa Rica to look at agriculture, rural life and biodiversity. The trip will include visits to fairtrade and organic farms, cloud forests, volcanoes, national parks, multinational agricultural plantations and much more. For details, visit www.fwn.org.uk or call +44 (0)1242 515 712.

JOIN

Environmental Law Foundation. A UK charity whose purpose is to help secure environmental justice for all. ELF empowers communities and individuals through advice, assistance and support. It influences the environmental agenda through events, publications and consultation. Contact ELF on +44 (0)20 7404 1030 or email info@elflaw.org.

The Chartered Institution of Water and Environmental Management (CIWEM) an independent professional body representing managers, and other professionals who are responsible for the stewardship of this country's environmental assets. Becoming a member will give you unlimited access to the key players in environmental management across all sectors. Email Membership@ciwem.org.uk or call +44 (0)20 7831 3110.

The Hydrogen Energy Association of UK and Ireland (HEAUKI) puts the case for hydrogen, the only feasible non-fossil fuel, clean and climate-friendly. For information and possible involvement, write to Co-ordinator, HEAUKI, 22a Beswick Street, Manchester, M4 7HR; telephone: +44 (0)161 273 8595; email co-ordinator@hydrogen-heauki.org.

Campaign for Adventure is a national initiative, aiming to improve understanding of the important benefits for individuals and society that stem from an adventurous approach to life. Visit www.campaignforadventure.org.

The Centre for Fortean Zoology has been co-ordinating research into mystery animals, out of place animals, zoofarm phenomena and bizarre and aberrant animal behaviour since 1992. Do you want to join us? Visit www.eclipse.co.uk/cfz.

PROJECTS

The Fairyland Trust is a new organisation dedicated to protecting ancient countryside, recreating natural habitats and making the land fit for fairies. Visit www.fairylandtrust.org.

A unique 'recycled' wildlife garden is under construction at the Gloucestershire Trust's HQ. The garden is being built using locally recycled and reclaimed materials and will open to the public in Spring 2002. For progress, visit www.gloucestershirewildlifetrust.co.uk

A not-for-profit service is under development to enable **organic growers to compete with supermarkets.** The growers deliver in bulk, but

receive close to retail prices. The customer gets tailored orders, fresh, locally grown with minimum packing from their local shop. Contact: Richard Page, Veg-Edible Limited, 50 Woodend Road, Alloway, KA7 4QR; tel: +44(0)1292 44300; email: richard_page@ntlworld.com.

Ec lodge and holistic lifestyle vacation project on New Zealand's South Island.

Excellent ethical investment opportunity and a chance to become involved in leading edge 21st Century ecotourism operation. Those interested in the investment opportunity or becoming a part of the development team should contact Dougal Crockett at dougal.c@ihug.co.nz.

PUBLICATIONS

Smart Development: Climate Change and the Built Environment. Available free of charge from sustainability Northwest and can be downloaded in Adobe Acrobat format from www.snnw.org.uk/smartdevelopment

The Dartmoor National Park Authority Fourth Annual Report. Available from Dartmoor National Park Authority, High Moorland Visitor Centre, Old Duchy Hotel, Princetown, Yelverton, Devon for £2.50, including postage and packing. Also available on www.dartmoor-npa.gov.uk.

CARTOONS – the perfect book on transportation for comic book fanatics. 100 pages of cartoons by Andy Singer. Also available CD-ROM of all graphics for free, non-commercial use. To order, contact CAR Busters, Krátká 26, 100 00 Praha 10, Czech Republic; Tel: +420 2 7481 08 49; Fax: +420 2 7481 67 27; email: carbusters@ecn.cz; website: www.carbusters.ecn.cz.

An Ethical Career in Science and Technology. Publication by Scientists for Global Responsibility challenging UK Science to take much greater responsibility for the consequences of its work. For further information, contact Dr Stuart Parkinson, telephone 07941 953640 or email pressoffice@sgr.org.uk.

Peace News. The international quarterly magazine for nonviolent activists. Packed with news, views and topical debate. Can you afford to be without it? For sample copy, email peacenews@gn.apc.org.

Safe Roads, Safe Communities. Road safety document by the National Assembly for Wales. Free of charge from Transport Policy 3 Division, National Assembly for Wales, Cathays Park, Cardiff or fax +44 (0)29 2082 3748.

Temenos Academy. Recorded lectures of Michaelmas Term 2001. All cassettes are £4.50 each, plus postage. For full list, contact The Temenos Academy, PO Box 203, Ashford, Kent, TN25 5ZT or call +44 (0)1233 813 663.

RESOURCES

Natural Friends. The introduction agency for non-smoking, environmentally-friendly and socially-conscious singles everywhere. Free details on telephone 0800 281 933 or visit www.natural-friends.com.

Personal and Global Change. 'A Revolutionary Speaker'. Talks by Michael Eaglemeare. Spiritual-ecological action. Talks given to

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Hemp is not only the new taste sensation but also one of the most complete sources of vegetable nutrition known to man. It is a rich source of essential fatty acids that are considered essential for optimum health in the body. MotherHemp's organic hemp oil is made from the finest quality extra virgin cold pressed hemp oil. It makes a great tasting accompaniment to salads, pastas and vegetables. For more information, telephone 01323 811 909 or visit www.motherhemp.com

Reader Offer:

MotherHemp has 20 bottles of organic hemp oil to give away. For a chance to win one, send a postcard marked 'Hemp Oil Offer' to MotherHemp Ltd, Tilton Barns, Tilton Lane, nr Fittle, East Sussex, BN8 6LL.



groups/seminars/conferences. Enquiries invited from UK/International. No charge is made. Telephone +44 (0)1392 877228; email michael@eaglemeare.org; visit www.eaglemeare.org.

Homeopathy for Animals. Helpful in most conditions, acute or chronic, and may be used alone or together with conventional treatment. Contact Lise Hansen, Primrose Hill Veterinary Clinic, 138 Gloucester Avenue, London NW1 8JA; telephone +44 (0)20 7586 8806.

For information, help and advice, your legal rights and the law for farmers, their families and others affected by the FMD crisis in the UK. Find out all you need to know about life in the countryside today. FARMTALKING.com Help-lines: +44 (0)1361 850282/850680.

FREE and independent energy efficient advice. Contact us for advice on saving money on your fuel bills this winter. Ask for one of our FREE Home Energy Check Surveys. Freephone 0800 512 012.

The Ethical Partnership is a co-operative of Independent Financial Advisers who specialise in Ethical and Socially-responsible investments. Contact Derek Vivian, tel: +44 (0)20 8763 1717; email: tep@dwvian.idps.co.uk; website: www.the-ethical-partnership.co.uk The Ethical Partnership is a Member of IFA network Ltd, which is regulated by The Personal Investment Authority.

SITUATIONS VACANT

Female help wanted for a woman with multiple chemical sensitivities and ME. £6 an hour plus travelling expenses. Flexible hours,

approx. 1-2 days a week, 5-6 hours a day, NE London. Non-smoker, preferably driver, 25+. Telephone +(0)1851 612 409 for more information.

The Secretary of State for Environment, Food and Rural Affairs (DEFRA) is looking to appoint a new member to the Lake District National Park Authority. Closing date 5 November. Applications and a guidance booklet can be obtained from Rachael Sayers, DEFRA Countryside Division, Zone 1/04, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6EB. Tel: 0117 372 8234; email rachael.sayers@defra.gsi.gov.uk.

World Institute for Development Economics Research (WIDER), Helsinki, has the following vacant positions: Deputy Director, Senior Research Fellow, Research Internships for PhD Students, short-term Sabbaticals. Details on these positions are available on our website: www.wider.unu.edu/vacancies/vacancies.htm.

SITUATIONS WANTED

Science graduate seeking employment in conservation/Green sector. Experience of research conservation abroad. Please contact Christopher, telephone +44 (0)1527 831187.

VISIT

W.A.R. (We Are Raw) Vegan Organic Rawfood Centre. Unit K4, Arena Business Centre, 71 Ashfield Road, London N4 1NY (near Finsbury Park, Manor House tube station). Offering food, accommodation, information, books, resources etc. Open from

6.30pm Tuesday to Sunday. Tel: +44 (0)208 800 4849.

Greenies EcoShop for all things green including alternative energy systems, solar water heating, household items and consumables, and energy saving consultancy. Shop purchase or mail order. Greenies, 2 Waterworks Road, Hastings, East Sussex, TN34 1RT. Telephone +44 (0)1424 422 845. Visit www.greeniesshop.co.uk.

Queens Wood Lodge. Vegetarian restaurant set in a Victorian Woodkeeper's cottage, in 77 acres of ancient woodland, five minutes walk from Highgate tube station. Delightful setting for parties and wedding receptions. Environmental Centre and organic garden. Queens Wood Lodge, Queens Wood, 42 Muswell Hill Road, London N10 3JP. Telephone Wanjiku or Murray on +44 (0)20 8444 2604.

City Farms and Community Gardens are locally based projects working with people, animals and plants. Each one is unique. They are (or aiming to become) community-led and managed, empowering those involved through a sustainable approach to what they do. There are currently 65 City Farms across the UK. For your nearest, visit www.farmgarden.org.uk or telephone the Public Liaison Unit on +44 (0)20 7983 4100.

Earth Matters, 67 High Street, North Berwick, is a new one-stop-eco-shop and environmental resource centre in this popular East Lothian town. All products stocked have been carefully sourced to meet stringent environmental and ethical specifications.

VOLUNTEERS

Intern Opportunities. If you are interested in joining our intern team, contact Sally Snow sally@theecologist.org for more details.

Global Vision International. GVI researches and identifies international projects that could benefit from a volunteer support programme. We offer a package to the paying volunteer, from pre-expedition support and training to project management, insurance and travel arrangements. Visit www.gvi.co.uk.

Students/volunteers needed to help promote *The Ecologist* in your local area – and make a few pounds as well. Join Sally's Army. Contact sally@theecologist.org for details. We are especially interested in hearing from people in Newcastle, Leeds, Manchester and Liverpool.

10 weeks to spare? **Cultural immersion in Thailand.** Group orientation followed by 8 week-plus volunteer placement. Choose from village homestay, wildlife conservation, teaching street children, meditation, etc. From £550, including accommodation and in-country support. Email: culturalventures@hotmail.com.

Volunteers needed for Earthwatch project in the **Picos de Europa mountains** in northern Spain monitoring butterflies, orchids and land use. More information on www.earthwatch.org.

The Foundation for Sustainable Development (GAIA) is seeking additional trustees to expand and strengthen the existing Board. Visit us on www.foundation-gaia.org or telephone +44 (0)20 8554 9389.

SPONSOR A SUBSCRIPTION

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The Ecologist regularly receives requests for free subscriptions from small charities, NGOs and campaigners from all over the world – from the East Timor Action Network to the Learning and Educational Resource Library in India. Although access to *The Ecologist* would provide vital help in their work, our limited resources don't allow us to help them as much as we would like to.

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By sponsoring a subscription to a charity, NGO or activist group, you will help support important work going on all over the world. If you are interested, we can provide you with further information about the organisations from whom we have received free subscription requests – or you can choose another organisation which you would like to support.

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People's Library of East Timor

'The Ecologist is full of important and very useful information for us'
Live and Let Live, Slovak Republic



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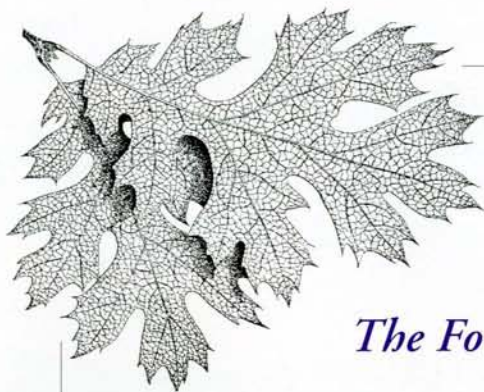
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Would you like to eat in a restaurant that...

- claims to only feed a veggie diet to its beef cattle, when this is true only for the UK where it is legally required? In the rest of the world it still feeds animal products to natural herbivores.
- is currently being sued by the Hindus of America for not disclosing that its French fries contained a natural flavouring derived from beef?
- claims to use 100 per cent free range eggs, but uses chickens kept in enclosed broiler sheds with less space per chicken than this sheet of paper?
- claims to be a big supporter of UK agriculture, but is encouraging US-owned, highly industrialised corporate agribusiness in the UK?
- is still not sourcing guaranteed GM-free dairy and beef products?
- receives between 1,500–2,750 customer complaints of food poisoning a year, including a serious outbreak of *E. coli* O157 poisoning in 1991?
- has produced deceptive promotional material claiming that the its food has positive nutritional benefits when the high fat, saturated fat, sodium, sugar content and fibre content of the type of food it sells is linked to serious diseases such as cancer, heart disease, obesity and diabetes?
- has been legally proven to exploit children by using them as more susceptible subjects of advertising, who then pressurise their parents into going to the restaurant?
- is embroiled in a scandal over exploitation of workers in China, producing toys for the corporation?
- despite claiming to adhere to stringent legal animal welfare standards, admits that 'as a result of the food industry, the suffering of animals is inevitable'? In June 2001, 18,000 chickens died of trauma and heat exhaustion whilst being transported to one of its suppliers.
- admitted 20 offences of illegally employing and over-working children aged 15-16 at two Surrey restaurants in August 2001?
- according to a survey on its inhouse website, makes as many as 11 per cent of its customers worldwide dissatisfied enough to complain each day? Of these, 70 per cent are unhappy with the way their complaint is then handled.
- considers the dumping of waste 'to be a benefit, otherwise you will end up with lots of vast, empty gravel pits all over the country'?
- sponsored a *New Statesman* supplement on a sustainable future for food and farming(!), with an advert on the back cover promoting its own standards of nutrition and animal welfare?
- sells 'strawberry' milkshakes that, on average, contain: amyl acetate, amyl butyrate, amyl valerate, anethol, anisyl formate, benzyl acetate, benzyl isobutyrate, butyric acid, cinnamyl isobutyrate, cinnamyl valerate, cognac essential oil, diacetyl, dipropyl ketone, ethyl acetate, ethyl amyl ketone, ethyl butyrate, ethyl cinnamate, ethyl heptanoate, ethyl heptylate, ethyl lactate, ethyl methylphenylglycidate, ethyl nitrate, ethyl propionate, ethyl valerate, heliotropin, hydroxyphenyl-2-butanone (10% solution in alcohol), a-ionone, isobutyl anthranilate, isobutyl butyrate lemon essential oil, maltol... and that's just A to Mc.*

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