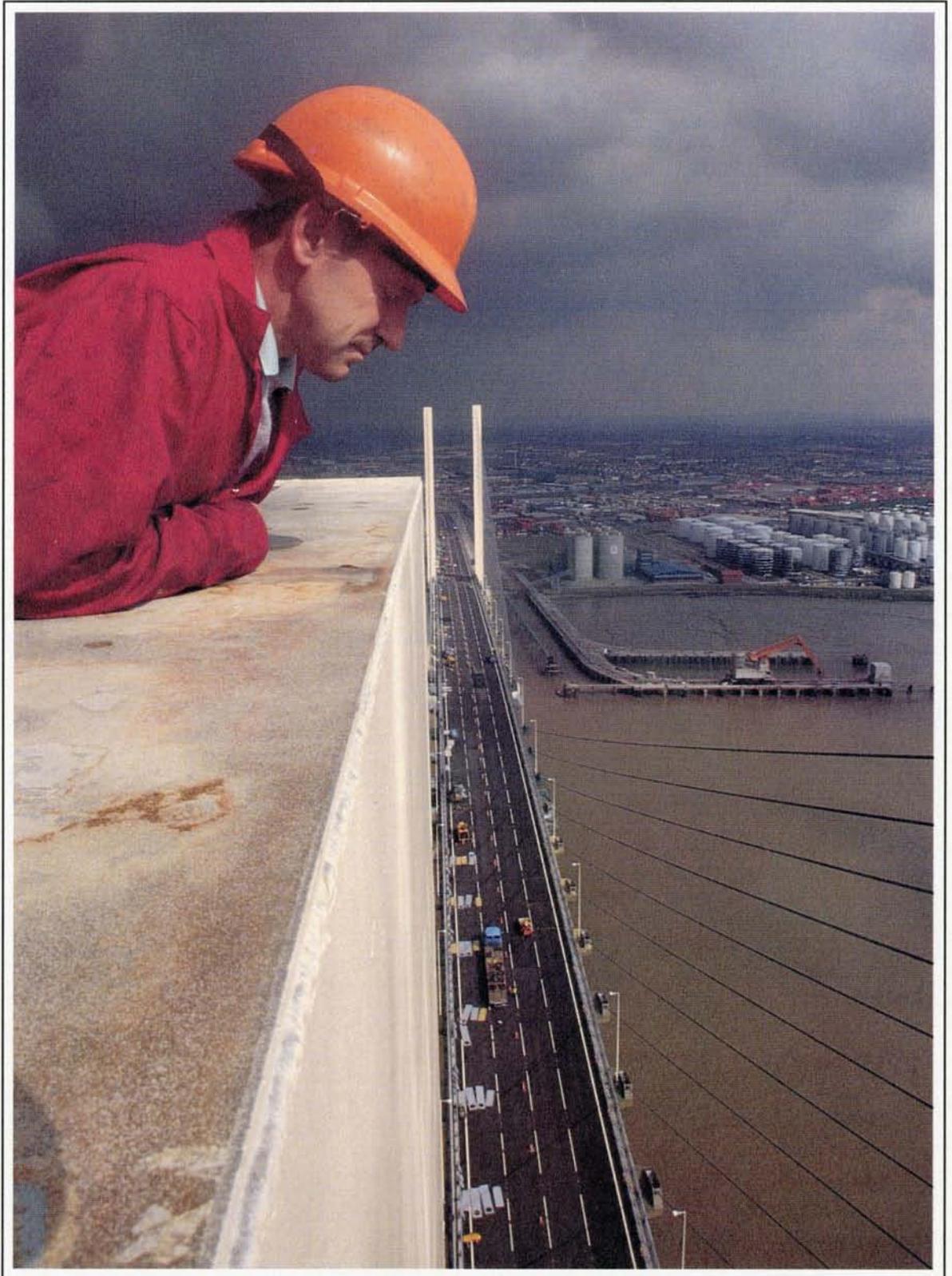


# The Ecologist

Vol 23 No 4 July/August 1993

£3 (US \$6)

- 
- The Infrastructure Lobby
  - Roads Across Europe
  - Time and Traffic
  - People versus Plans in Colombia
  - The Trans-Amazonian Highway
  - Harvesting the Rainforest
- 



ISSN 0261-3131



**Road Schemes and Stratagems**  
North and South in Pursuit of Mobility

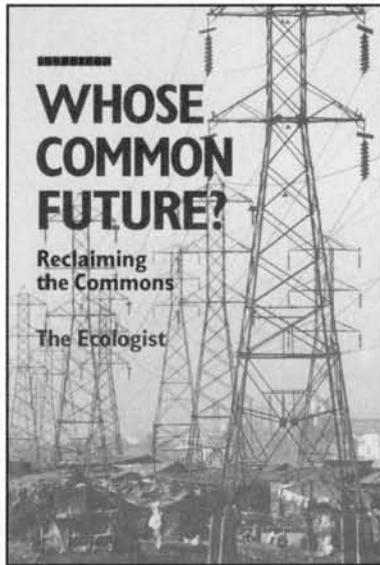
## NEW BOOKS

"an arresting and fruitful perspective on development, a hopeful one, pointing to the myriad creative ways in which local peoples subvert the development process"

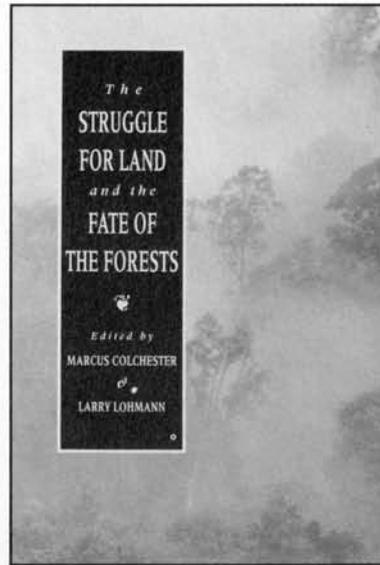
Frédérique Apffel-Marglin

"a timely analysis to protect us from the myopia of technological fixes for the environmental crisis... a coherence missing in most environmental writings today... essential reading for anyone searching for genuine solutions"

Vandana Shiva



*Whose Common Future? Reclaiming the Commons*  
The Ecologist  
Earthscan 1993, £9.95



*The Struggle for Land and the Fate of the Forests*  
edited by Marcus Colchester & Larry Lohmann  
World Rainforest Movement, *The Ecologist*, Zed Books 1993, £12.95

Tropical forests are vanishing faster than ever. This powerful book challenges the assumption that overpopulation and underdevelopment are the causes. The key to halting damaging deforestation is local power over the land. It includes background to agrarian reform in Latin America, Asia and Africa; case studies from Guatemala, Brazil, Zaire, Thailand, Indonesia and the Philippines; and an analysis of the policies of international agencies.

**The Ecologist is published by Ecosystems Ltd.**

**Editorial Office:** Agriculture House, Bath Road, Sturminster Newton, Dorset, DT10 1DU, United Kingdom  
Tel: (0258) 473476 Fax: (0258) 473748 E-Mail [ecologist@gn.apc.org](mailto:ecologist@gn.apc.org)

**Subscriptions:** RED Computing, 29A High Street, New Malden, Surrey, KT3 4BY, United Kingdom  
Tel: (0403) 782644 Fax: (081) 942 9385

**Books and Back Issues:** WEC Books, Worthyvale Manor, Camelford, Cornwall, PL32 9TT, United Kingdom  
Tel: (0840) 212711 Fax: (0840) 212808

### Annual Subscription Rates

£18 (US\$32) for individuals and schools;

£45 (US\$70) for institutions;

£15 (US\$25) concessionary rate (unwaged people and subscribers in the Third World and Eastern Europe).

Air mail £11 (US\$19) extra.

Concessionary rate only available from RED Computing and The MIT Press and not through other subscription agents.

*The Ecologist* is published bi-monthly. The rates above are for six issues, including postage and annual index.

Subscriptions outside North America payable to *The Ecologist* and sent to RED Computing (address above). We welcome payment by UK£ cheque drawn on UK bank, US\$ check drawn on US bank, eurocheque written in UK£, banker's draft payable through a British bank, UK or international postal order, Access, Visa or MasterCard.

North American subscriptions payable by check drawn on US banks in US funds to: MIT Press Journals, 55 Hayward Street, Cambridge, MA 02142, USA. Tel: (617) 253-2889

### Advertising

#### Display Rates:

Full Colour Outside Back Cover	£950
Full Page (261x185mm)	£900
Half Page (130x185mm/261x90mm)	£500
Quarter Page (65x185mm/130x90mm)	£275
Third Page (261x58mm/85x185mm/175x121mm)	£325
Sixth Page (130x58mm/65x121mm)	£195
Eighth Page (65x90mm)	£150
Sixteenth Page (32x90mm)	£95

17.5% VAT to be added to above rates.

Typesetting charge: 20% of advertising rate.

Further information and full rate card from:  
**Jake Sales, 6 Cynthia Street, London, N1 9JF, UK**  
Tel: (071) 278 6399 Fax: (071) 278 4427

#### Inserts

Up to 265x185mm, not more than 10g each:  
£45 per thousand, full run, plus VAT; £60 per thousand, part run (minimum 4,000), plus VAT.  
Further information from the Editorial Office.

#### Classified

See inside back cover

### Contributions

The editors welcome contributions, which should be typed, double-spaced, on one side of the paper only. Two copies should be sent with original. Word processed contributions should be on a 3.5 inch disk (MS-DOS or Macintosh) in text file (ASCII) format. Illustrations (B/W or colour prints or transparencies, line drawings, tables, maps, etc.) should be included where appropriate. Detailed guidelines for contributors are available on request. Manuscripts should be addressed to the editors and sent to the Editorial Office.

While every care is taken with manuscripts submitted for publication, the editors cannot guarantee to return those not accepted. Articles published in *The Ecologist* do not necessarily express the views of the editors.

*The Ecologist* International Serial Number is: ISSN 0261-3131.

Printed by Penwell Ltd, Station Road, Kelly Bray, Callington, Cornwall, PL17 8ER, UK.  
Tel: (0579) 83777

Copyright: *The Ecologist* 1993

*The Ecologist* is available on microfilm from University Microfilms International, 300 North Zeeb St., Ann Arbor, MI, USA

# The Ecologist

Vol. 23, No. 4, July/August 1993

## Publisher

EDWARD GOLDSMITH

## Founding Editors

EDWARD GOLDSMITH

PETER BUNYARD

## Editorial

NICHOLAS HILDYARD

SARAH SEXTON

SIMON FAIRLIE

## Editorial Assistant

SALLY SNOW

## Associate Editors

PATRICIA ADAMS

*Probe International  
(Canada)*

TRACEY CLUNIES-ROSS

*(England)*

MARCUS COLCHESTER

*World Rainforest Movement  
(England)*

RAYMOND DASMANN

*University of California,  
Santa Cruz (USA)*

SAMUEL S. EPSTEIN

*University of Illinois  
(USA)*

ROSS HUME HALL

*(USA)*

SANDY IRVINE

*The Green Party  
(England)*

MICK KELLY

*University of East Anglia  
(England)*

MARTIN KHOR KOK PENG

*Consumers Association of  
Penang (Malaysia)*

SMITHU KOTHARI

*Lokayan Social Action  
Group (India)*

SIGMUND KVALØY

*Ecopolitical Ring of Cooperation  
(Norway)*

LARRY LOHMANN

*(USA)*

PATRICK MCCULLY

*(Northern Ireland)*

JOHN MILTON

*(USA)*

JIMOH OMO-FADAKA

*African Environmental  
Network (Kenya)*

JOHN PAPWORTH

*Fourth World Review  
(England)*

ROBERT PRESCOTT-ALLEN

*PADATA  
(Canada)*

JOHN SEED

*Rainforest Information Centre  
(Australia)*

VANDANA SHIVA

*Research Centre for Science  
and Ecology (India)*

ROBERT WALLER

*Commonwealth Human Ecology Centre  
(England)*

RICHARD WILSON

*(England)*

DONALD WORSTER

*University of Kansas  
(USA)*

## EDITORIAL OFFICE,

AGRICULTURE HOUSE, BATH ROAD,  
STURMINSTER NEWTON, DORSET,

DT10 1DU, ENGLAND, UK.

TEL +44-258-473476 FAX +44-258-473748

E-MAIL ECOLOGIST@GN.APC.ORG

## Editorials

**The Infrastructure Lobby** ..... 122

*Simon Fairlie*

**Caught in the Crossfire** ..... 124

*Andrew Gray*

## Feature Articles

**Europe's Motorways: The Drive for Mobility** ..... 125

*Chris Bowers*

The European Commission plans to finance the construction of another 12,000 kilometres of motorway in Europe. But some elements in the EC administration are beginning to heed the warnings of environmentalists that subsidized road construction will create more traffic and congestion.

**Time Pollution** ..... 132

*John Whitelegg*

The main aim of motor transport and road building is to save time, but a number of social and economic factors operate to ensure that they do precisely the opposite.

**Driving Roads through Land Rights: The Colombian Plan Pacífico** ..... 135

*Jon Barnes*

Although most of the Colombian government's development plans for the country's isolated Pacific region have yet to be realized, they have attracted more colonizers and land grabbers, and driven black and indigenous community groups to demand land rights.

**Brazil's BR-364: A Road to Nowhere?** ..... 141

*Alexander Shankland*

Chico Mendes was murdered nearly five years ago because he opposed the BR-364 trans-Amazonian highway. Yet now, Mendes' political heirs support the paving of the road, which is set to cross the Andes into Peru, with potentially disastrous consequences.

**The Rainforest Harvest: Who Reaps the Benefit?** ..... 148

*Stephen Corry*

Products from the rainforest are now being sold in the West as a means of saving the forests and their indigenous inhabitants. The reality behind the hype is very different, and marketing campaigns deflect attention from the much more critical issue of indigenous land rights.

**Books** ..... 154

**Letters** ..... 159

**Campaigns** ..... **Centre Pages**

Mexican Forests • East Timor Resistance • Chittagong Hill Tracts Repatriation • Global Anti-Golf Movement • Texaco Clean Up in Ecuador • British Road Lobby • US Nuclear Testing • Costs of British Nuclear Fuel • Eastern Europe Nuclear Protests • Bangladesh Flood Action Plan • Narmada Review • British Strikers • British Forests

Cover photo: Dartford cable-stayed bridge across the River Thames, London, UK (Pete Addis/The Environmental Picture Library).

*The Ecologist* is printed on recycled paper, whitened with hydrogen peroxide.

# The Infrastructure Lobby

## "The Slow Breathing of the Monster"

With the world economy still floundering uncertainly on the brink of a slump, interest has revived, once again, in the workings of the Kondratiev cycle. Nikolai Kondratiev, a Marxist writing around 1920, was the first to observe that the industrial economy seemed to expand and contract in waves lasting approximately 50 years. To quote Murray Sale, writing last year:

"Kondratiev's pioneering study found long wave peaks around 1817, 1870 and 1914, troughs around 1745, 1790, 1844 and 1890. Extrapolation suggested that another trough was due to start in the 1930s. It duly arrived, kindling interest in the missing Kondratiev, just about the only theorist to have predicted the Great Depression. Extrapolating again, we can see that another long wave trough is due . . . sometime just about now."

Last year, a book by Andrew Tylecote,\* added a new dimension to the subject. Each of the boom periods, he suggested, is associated with the successful emergence of a new "technological style", characterized by a new form of transportation. The upswing at the end of the 18th century was stimulated in Britain by the development of the canal system, the rising boom period of 1844-1870 by the emerging railway network, part of the steam transport style.

The next wave does not break so neatly onto the pages of history, since it is punctuated by the Great War. The steel and electricity style before the War, associated with the electric suburban railway, developed in the decade of boom after 1918 into a Fordist style, related to the introduction of the motor-car. After the 1930s slump and World War II, Fordism came into its own with the production of motor-cars and aeroplanes, super-tankers and motorways — a transnational oil-based economy that only started to weaken after the oil crisis of 1973.

Sweeping theories of history should be taken with more than a pinch of salt. But the suggestion, in this account, that an economy expands until it reaches the limits of its distribution system (as opposed to its productive capacity) is an attractive one. Slumps tend to be caused by a glut — not by an inability to produce the goods so much as by an inability to shift them. One promising way out of recession is to reach a larger market by developing new transport systems.

## Lobbies for Growth

Those at the helm of development have long known this; often they have been as ruthless in eliminating the old transport system as they have been eager to introduce the new. No sooner had the British canal system been completed at great expense, than it was judged to be obsolete by the architects of economic growth. New railway companies, flush with enterprising investors' money, went around buying up canals to run them down; within a few decades the canal system was moribund and Britain was covered in a network of railways. "Now every fool in Buxton can be in Bakewell and every fool in Bakewell can be in Buxton" was the comment of John Ruskin upon the opening of the line between the two towns.

A century later, it was the turn of the railways. In 1936 Standard Oil, General Motors and Firestone formed a company

to buy up train companies in the US and close them down. By 1956, over a hundred electric surface rail systems in 45 cities had been acquired and shut down. In Britain, much the same thing happened, except that it was perpetrated by the state. The government bought up the railways after the second world war, tore up 46 per cent of the track and ran down the rest. It now plans to sell the remains back to the private sector, which is expected to close down still more of the network.

In the vanguard of the movement to destroy the railways have been those who stand to benefit most by their replacement: petrol companies, motor manufacturers, road construction companies, though these interests have received ample support from large corporations not directly connected with the road industry. The British Roads Federation (BRF), for example, founded in 1932 "to combat the sinister and distorted propaganda of the railways to enslave British industry", counts among its members bodies as diverse as Tate and Lyle Sugars, Bulmers Cider Ltd. and the National Farmers Union. And the road lobby has been able to enlist the support of governments in almost every country throughout the Western world.

What unites all these interests is the prospect of economic growth. The world's first motorways were built by the Third Reich to bring Germany out of the depths of recession. The plan worked, and the numerous civil servants and industrialists who trooped to Germany just before the war to view Hitler's masterpiece did not forget what they saw. America embarked upon its own "freeway" system — "What is good for General Motors is good for the country" argued a representative of the company in 1952. By 1954, the Germans were so worried about being left behind that the road lobby group, Transportation Forum, warned that "our traffic network is, compared to the American, catastrophically obsolete . . . The level of motorization in Germany is strongly linked with the expansion of our economy". Thirty years later, the British Society of Motor Manufacturers and Traders was insisting that "the health of the economy is inextricably linked to the health of the motor industry". In Britain today, the Department of Transport's first objective for road-building is "to assist economic growth by reducing transport costs", an axiom written into the evidence that it presents at the public inquiry for every single road-scheme.

## Modal Integration

That the road lobby is as strong, if not stronger, than it was 70 years ago, can be seen by the extensive road programmes being put forward to jerk the economy into life in almost every country in the North, not to mention in the straggling Third World.

But lately the rhetoric has changed. The lobbyists and planners are not now looking specifically towards roads as a stimulus for growth, but to something they call "infrastructure". By this they mean a co-ordinated distribution system using several different technologies; or in the language of the European Round Table of Industrialists (ERT), "a single network, linked by markets, technology, and organization, which produces a single output: mobility for the citizen and the economy." (see Box, p.127).

There is a place for everything in this single network. Railways are now back in favour — provided they are either "high-speed" trains such as TGV, or part of "multi-modal" road/rail freight

networks. Computer technology is welcomed, particularly as a means of assuring "intra-modal integration", though it is subsidiary to the whole, and not viewed as a means of diminishing the need for more transport. "The growing importance of telecommunications", says ERT, "both creates traffic (by linking distant centres) and substitutes for personal mobility." That the first effect is expected to be more significant than the second is borne out by ERT's prediction that "demand for most forms of transport in Europe will double within periods corresponding to the time needed for planning, decision making and executing major infrastructure projects" — in other words, as soon as possible.

Governments agree about the need for infrastructure. President Clinton has promised "to spend \$80 billion on renovating the country's roads, creating a new high-speed rail network linking America's main cities and developing new technologies to expand the capacity of the existing infrastructure". The European Commission has pledged itself to "the establishment and development of trans-European networks, in particular in the sectors of transport, telecommunications and energy infrastructure". "For British industry to make the most of the business opportunities presented by the single market" writes a conservative MEP, "we need to provide the infrastructure to cater to their demands".

The emphasis on infrastructure should not, however, be taken to mean a shift from road transport to rail or water. The forecast is for a doubling of most forms of transport, including road transport. Since at present, in the European Community, nearly five times as much freight is carried by road as by rail, and about 12 times as much passenger traffic, the bulk of the new infrastructure is going to be roads. "Intra-modal integration" merely means that the different forms of transport will act more efficiently as tributaries and distributaries for each other — business as usual, but more efficient.

## A Bridge Too Far

This infrastructure is not confined to the industrialized world, but is extending its web around the globe. Nearly all governments, to meet the demands imposed upon them by the international economy, are pumping borrowed money into infrastructure schemes, centred for the most part on roads. Amazonia, served by the most extensive natural water transport network in the world, is being rapidly criss-crossed with roads, and the Congo basin is following suit. The Pan-American highway, from Patagonia to Alaska, is missing only fifty kilometres across the Darien gap in Colombia. Plans have been mooted to link Alaska to Siberia with a road bridge across the Bering Straits. When these schemes are completed, motorists will be able to drive all the way from Buenos Aires to Cape Town, via New York and Moscow. The greater part of the world's landmass will become, in effect, one continent.

No island is safe from this encroaching infrastructure; no community or culture, however well shielded by geographical barriers or national borders, will be left untouched in the drive to prise open the remaining markets.

## Serving the Service Economy

For those in the Third World, this will mean further rounds of enclosure: more colonization, more displacement of people, more disruption of local economies, more sacking of the environment. Nevertheless, for many in the poorer countries, there is at least a prospect, however illusory that may prove, of attaining a higher standard of living. The roads will bring the

consumer goods associated with a Western lifestyle.

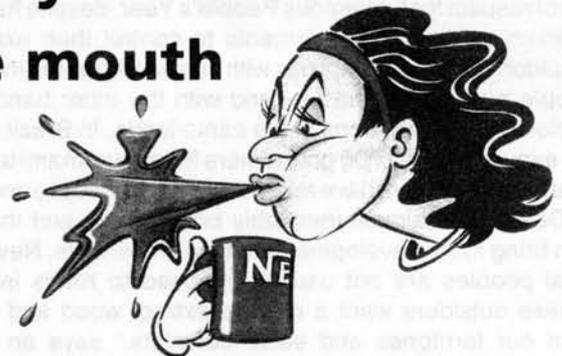
For many in the wealthy North there is no such incentive, since there is already a glut of most of these commodities; indeed this overproduction plays a major part in the recession. The conventional solution — that each country escape recession by producing goods more efficiently than its neighbour — only aggravates the problem.

The improvement of infrastructure is an attempt to cope with this unsaleability, part of the move from a manufacturing to a "service" or distribution economy. Goods will be shunted around with ever greater frequency and over ever greater distances to maintain the illusion, expressed in the annual GNP growth rate, that people's standard of living is still rising. As transport costs decrease, competing firms will venture further and further afield selling identical products in each other's territory, manufacturers will look further abroad to find the cheapest supplier of component parts, workers will be called upon to represent their firms at ever-increasing distances from home. Not only will the trips be longer but they will be more frequent and, it seems, last into the night: "It is now realized" the ERT tells us almost apologetically, "that the modern service-based network requires many individual journeys during an extended working day."

The result for the citizen will be less an increase in the amount of commodities available, than an increase in travel and traffic. People will have to travel further to work, further to shop, further to visit their relatives and further to find a holiday resort that has so far escaped the sameness inflicted by global infrastructure. And they will have to put up with the increased traffic caused by everyone else travelling further, not to mention the fleets of 40-tonne Euro-lorries carting more or less similar goods in opposite directions across the continent.

This is not what most people want or have been led to expect from economic growth. As the enormity of the trans-continental

## Some things leave a nasty taste in the mouth



Every day, more than 4000 babies die because they're not breastfed. That's not conjecture, it's UNICEF fact.

But companies like Nestlé know that if they don't get babies on the bottle, they do a lot less business.

So what do they do? They aggressively promote their baby milks, breaking a World Health Organisation code of marketing.

**Don't let them get away with it. Boycott Nescafé.**

I pledge not to buy Nescafé until Nestlé abides by the spirit and letter of the WHO/UNICEF code on the marketing of baby milk.

Please send further information.

I enclose £5 for your action pack.

I enclose a donation of £50  £35  £10  £5  other £ \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_ EC \_\_\_\_\_

Postcode \_\_\_\_\_



Baby Milk Action  
FREEPOST  
Cambridge  
CB2 3BR

In the USA, reply to ACTION, 129 Church Street, New Haven, CT 06510. Tel: 203 787 0061.

infrastructure project impinges upon people's localities, many are beginning to question its logic. Those who start out by objecting to a road scheme that runs through their own backyard must eventually consider the implications of siting it in their neighbour's, or indeed anywhere. As local objectors in a region or along the length of a trunk road join forces and examine the effect that a road scheme in one area will have upon traffic in another, they cannot but become aware of the phenomenon of traffic creation, and of its pointlessness. Gradually, as the anti-road movement joins hands across Europe, a new consensus is gaining ground: "No More Roads!"

The demand strikes to the bone. Road traffic is the main despoiler of nature and community; it is a principal cause of

global warming and of atmospheric pollution; and it is the most blatant example of the disparity between Northern and Southern lifestyles. It is all of these things because roads are the basis of infrastructure, the skeleton around which the whole shaky facade of economic growth is built. If we in the North are serious about trimming our consumption to sustainable levels, and if we want to do it with a minimum of pain and a maximum of benefits, then there is one very obvious way to begin: stop building roads.

Simon Fairlie

\* Tylecote, A., *The Long Wave in the World Economy*, Routledge, London, 1992.

## Caught in the Crossfire

How many people know that 1993 is the United Nations' Year of Indigenous Peoples? Its obscurity is an apt reflection of the attitude of the media and governments to the 300 million indigenous people living throughout the world. The Human Rights Conference in Vienna in June refused to consider as a priority the constant human rights violations indigenous peoples face. Little is heard of the war waged by Indonesia against the peoples of East Timor and West Papua, the atrocities perpetrated by India against the Nagas, the mass killings in Peru and Guatemala, or the deaths and torture by the Bangladesh army of the peoples of the Chittagong Hill Tracts.

Even where indigenous people are not subject to attempts at genocide, they are often caught in the cross-fire between two warring camps. On one flank, there are the agents of development who want to utilize natural resources to pay off government debts and modernize national economies; on the other, "conservationists", often from the North, who oppose human settlement in reserved areas in order to protect the rainforest from resource exploitation.

The developers and colonizers have not, of course, eased off out of respect for Indigenous People's Year, despite half-hearted attempts by some governments to control their excesses. In Ecuador, the government has with one hand granted the Huaorani people a protected area — and with the other handed out oil exploration concessions in the same lands. In Brazil, in spite of the expulsion of 40,000 gold miners from Yanomami territory last year, 10,000 of them have returned, bringing disease and violence.

Developers almost invariably bring roads, and the roads in turn bring more development and more colonists. Nevertheless, local peoples are not usually opposed to roads in principle. "These outsiders want a road to extract wood and resources from our territories and settle colonists," says an Arakmbut leader from the Peruvian Amazon. "We are opposed to any road with this aim. If we want a road, it will be to help us export our produce such as pineapples or bananas".

Barter, exchange and trade have been an integral part of indigenous economies for centuries. Many highland communities in the Andes, for instance, have constructed their own roads to transport their produce to local markets. For them, a road is not a means of bringing in colonists, but a means of enabling local peoples to send their produce out. Most local peoples want to build up their economic power at a local level, to have control over their territories and resources and to have the main say in the movement of goods in the local economy.

Whether roads have been built in their interests usually depends on the extent of local control over development. Indigenous peoples want to control local political processes and facilitate their self-determined entry into the local economy on fair and equitable terms.

Once indigenous peoples control their own territories, however, there is a fear among conservationists of the North that they will destroy their own resources for short-term gain. Indigenous peoples have the capacity to do this, but on the whole, they have a vested interest in their long-term survival and want their cultures and societies to continue for future generations. They want to live sustainably as they have done for hundreds, if not thousands, of years.

However, some indigenous peoples do choose to deplete their resources in order to survive. In response, Northern conservationists would act far more wisely by facilitating mutually beneficial exchanges of views and experiences between indigenous peoples than by patronisingly telling them what to do. For example, many indigenous peoples could learn from the Shuar's unhappy experiences raising cattle in Ecuador, or the comparatively successful forest management of the Yaneshain in Peru.

Over the last 25 years indigenous peoples have learnt the value of communicating with each other about mutual problems, and there are now indigenous people's alliances in many countries. They are also learning the value of co-operating with local non-indigenous people. In the Madre de Dios of Peru, for example, a strong alliance has developed between indigenous groups and the federation of non-indigenous forest people who have each voiced mutual recognition and support of each others land rights.

The struggle of these alliances for recognition of their rights locally is reflected in the struggle for international recognition by the worldwide indigenous peoples' movement which has emerged over the last 25 years out of the decolonization process and the civil rights movement. From its beginnings in Australia, North America and Scandinavia, the influence of indigenous peoples has spread throughout Central and South America, Asia and the Pacific and has now taken root in Russia and Africa.

The dismal lack of interest in the 1993 Year of Indigenous Peoples has been brightened by one event: the recognition of the Guatemalan indigenous leader, Rigoberta Menchu, as a Nobel Peace Prize Winner. She has long struggled for the fundamental rights of indigenous peoples, for self-determination, territorial integrity and cultural respect. At the same time, she has advocated, where appropriate, strong local alliances between indigenous peoples and other oppressed sectors of society, alliances which have aided the extremely difficult and dangerous struggle for survival in Guatemala. Indigenous women are at the forefront of this struggle to seek a better world for themselves, their descendants and for all of us.

Andrew Gray

Andrew Gray works for the International Working Group on Indigenous Affairs (IWGIA).

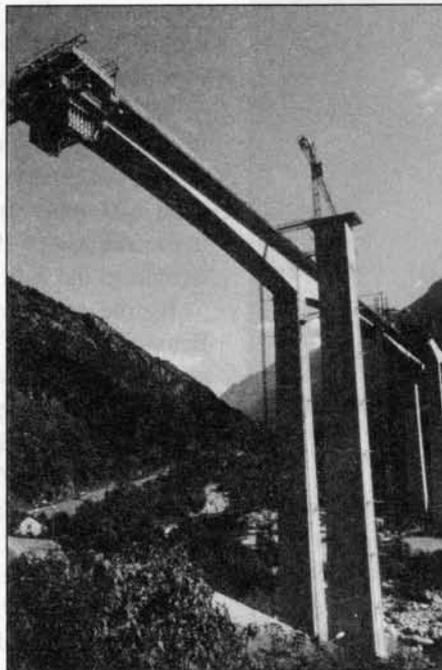
# Europe's Motorways

## The Drive for Mobility

by  
Chris Bowers

*The European Commission, egged on by a powerful road lobby, has produced guidelines for a massive road expansion programme throughout Europe to satisfy the "demand for mobility". However, other recent EC documents indicate a growing recognition at Brussels that building more roads is pointless, because it generates more traffic. Environmental groups argue that the demand for roads will continue to grow as long as roadbuilding is subsidized. If the price of roads reflected their true costs, there would be a significant shift to public transport and a reduction in the demand for mobility.*

In July 1992, the EC commissioner for transport, Karel van Miert, published four documents under the collective heading Trans-European Networks: one dealt with transport in general, one with roads, one with combined transport (mainly road and rail) and one with inland waterways. The roads document proposed up to 12,000 kilometres of new motorways across Europe by the year 2002, an increase of almost 50 per cent in the present network and of 32 per cent in the amount of land covered by motorways. It proposed spending about 60 times as much money on roads as on rail. The proposals reflect a bias towards road transport that has existed in European policy since the end of World War II. Since 1970, road freight traffic in Europe has more than doubled, while rail freight traffic has slightly declined.<sup>1</sup>



Sunil Gupta/Network

The 32-page document<sup>2</sup> does not authorize the European Commission to build these roads, but proposes to give funds to governments who undertake to build them. One Brussels-based campaigner described the proposals as "a shopping list for national and industrial road interests". The possibility of EC funding will be particularly attractive to the poorer members of the Community — Greece, Ireland, Portugal and Spain. These countries also benefit from a special "Cohesion Fund", set up under the auspices of the Maastricht Treaty and designed to provide money for transport and environmental projects.

### Jumping the Gun

The timing of Karel van Miert's transport guidelines was interesting. When they appeared, the Commission was finalizing draft legislation, in the form of an EC White Paper on a Common Transport Policy; and the Commission itself (the 17 politicians appointed by national governments who in effect act as an EC

cabinet) was nearing the end of its four-year term. It seemed an inappropriate moment to be publishing plans for expanding European transport networks.

But at the same time, the 1991 Maastricht Treaty was running into difficulties following the first Danish referendum in June 1992. The Treaty dictates that trans-European transport networks should contribute to the establishment of the internal market and the promotion of "economic and social cohesion". It ordains that a series of masterplans should be drawn up by the Commission, and only those projects that have been identified within these plans can qualify for support. In the words of the Treaty, "the masterplans describe the infrastructure of Community interest needed to meet increased demand for mobility."<sup>3</sup>

However, once the Maastricht Treaty has been ratified (assuming it will be) some crucial changes to the Community's decision-making processes will take place, among them an increase in powers for the European Parliament — a parliament that is not necessarily sympathetic to the Commission's ambitious transport programmes. Nel van Dijk, the Green MEP from The Netherlands who chairs the European Parliament's transport and tourism committee, says of the timing of van Miert's proposals:

"The masterplans or guidelines can only come into effect under the Maastricht Treaty, and under Maastricht the European Parliament has the right to veto Commission masterplans. In theory, there is nothing wrong with publishing a set of guidelines before the Maastricht Treaty is ratified by all 12 member states, but what appears to be happening is that these masterplans — which at the moment only exist in the form of communications from the Commission — are being debated under the pre-Maastricht decision-making process which does not give the European Parliament the power to intervene. What worries me is that the urge to get the roads built is motivating the Commission

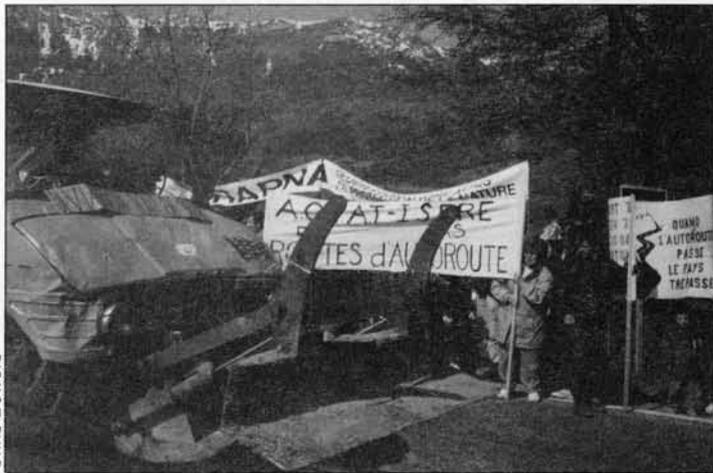
Chris Bowers is a freelance writer on transport and tennis. He was founder director of the Environmental Transport Association and later co-ordinator of the European Federation for Transport and the Environment (T&E).

to get the masterplans approved before Maastricht when we can't veto them, so that after Maastricht, when the money for transport infrastructure is legalized, the plans will be all ready to be adopted."<sup>4</sup>

## The Dilemma of Sustainable Mobility

Karel van Miert's guidelines, and the timing of their publication, are evidence of a significant tension within the EC between the drive for increased mobility and "economic cohesion", and concern for the environment.

The White Paper on transport pre-empted by Van Miert's guidelines was finally published on 2 December, 1992. It was expected to put an environmental element into any draft Common Transport Policy, as required under the Single European Act of 1985. In fact it pays little more than lip service to the environment, but it does concede that transport has a damaging impact:



Chris Bowers

*The French are starting to say "Non!" to more motorways. A demonstration against the A51 autoroute (see Box p.128).*

"Trends indicate that, in a 'business as usual' scenario, energy consumption and carbon dioxide CO<sub>2</sub> output by the transport sector are likely to increase by 24.6 per cent between 1990 and 2000." The EC has set itself the target of stabilizing CO<sub>2</sub> emissions at 1990 levels by 2000. The White Paper continues: "Although technological progress and measures already taken will mitigate the environmental impact, in the absence of additional policy actions, significant worsening of the situation is still likely as regards pollution, notably CO<sub>2</sub> emissions."<sup>5</sup>

The White Paper, however, omitted a remarkable sentence which appeared in its forerunner, a Commission Green Paper published in February 1992 on the impact of transport on the environment. This stated that "infrastructure planning should not necessarily seek to promote an increase in capacity, since in certain instances this might boost transport demand and in the long term exacerbate the problem, particularly in the case of road transport."<sup>6</sup>

This omission is significant — critics of the road expansion programme have argued for some time that the "increased demand for mobility" is stimulated by the building of roads. They cite schemes like the M25, London's orbital motorway, which was built to take 80,000 vehicles a day in 1986, but which almost immediately had to cope with double that number because of the additional demand for journeys created by the supply of the new road. Such considerations are not welcomed by those whose main concern is to promote economic growth. When asked why this sentence had not made it into the White Paper,

a Commission official commented: "It was amazing it made it into the Green Paper at all!"

The White Paper demonstrates that the Commission is well aware that its aim of boosting the transport infrastructure conflicts with its obligation to protect the environment. In official papers and statements it denies any incompatibility and uses phrases such as "sustainable mobility". In practice, however, it works to the principle that without transport growth there can be no economic growth; and that economic considerations take precedence over the environment.

## Twyford Down

Nowhere was this more strongly illustrated than in the case of Twyford Down. The British government wanted to extend the M3 motorway through the Hampshire countryside and decided on a route which would destroy a major part of the Down. Under EC law, the Department of Transport (DOT) was obliged to provide a wide-ranging, non-technical Environmental Impact Assessment (EIA); the EIA it submitted was neither wide-ranging nor non-technical and was rejected as inadequate by the European Commission.

When the DOT decided to press on with the M3 extension, the EC environment commissioner, Carlo Ripa di Meana, warned that an acceptable EIA was still outstanding. For eight months Ripa di Meana conducted his talks with London discreetly, until in the autumn of 1991 he informed the DOT that he would take Britain to the European Court of Justice.

By the summer of 1992 Britain had given its response to Brussels. Ripa di Meana was still not satisfied and wanted to continue the legal action. Then suddenly, he left Brussels to take up a position in the Italian cabinet, and Jacques Delors replaced him by none other than Karel van Miert, the transport commissioner. Within a month, the Commission accepted Britain's original EIA, the legal action was dropped and the road is now being built.

On a British television programme in February 1993,<sup>7</sup> the Conservative MP, Stephen Milligan, admitted that Jacques Delors had ordered the legal action to be dropped as a concession to John Major in the negotiations over Maastricht. Asked on the same programme what had happened in the month after he left Brussels, Ripa di Meana (at the time still Italian environment minister) smiled in embarrassment and said: "I think you will respect my silence."

## The Missing Link

The precise political mechanics that eased out Ripa di Meana may never be revealed. But the forces lying behind the drive for increased mobility and economic growth that clearly dominated in the Twyford Down episode are not difficult to isolate. Over the last decade, there has been a concerted effort by an increasingly Europeanized road lobby to persuade administrators of the need for "improved infrastructure".

The Commission's trans-European networks road document frankly acknowledges its debt to the road lobby: "In drawing up its proposals it particularly took into consideration the recommendations adopted by the Motorway Working Group". The MWG was an *ad hoc* group, especially invited to contribute by the commission. It was made up of seven groups, including:

# The European Round Table

The most influential actor in the European transport lobby over the past decade has been the European Round Table of Industrialists (ERT), which numbers among its members Fiat, Volvo, Daimler-Benz, MAN, Petrofina, Total, Shell, BP, Pirelli and Plessey. It has also been a consistent supporter of the Single Market and the abolition of national barriers.

It first made its mark in 1984 with the publication of *Missing Links*, which argued that "cross-border transport provision" was a "deficiency" which acted as a "barrier to European economic and social progress". It identified physical gaps in Europe's infrastructure, and highlighted three: the Channel Tunnel, the Scan-Link between Oslo and Lübeck in Germany and high-speed train links (TGV and Maglev). All three projects are now under construction.

In 1991, the ERT published *Missing Networks* which assessed the demands made upon Europe's infrastructure by the advent of the Single Market for which it had so effectively campaigned in earlier publications. "The 1992 programme" it claimed, "increases the demand made on Europe's infrastructure in several ways: increased intra-Community trade flows . . . lower costs through deregulation of road, rail, air and water transport . . . more rapid economic growth and associated increases in transport." It also anticipated "continued growth of suburbs, with attendant commuter traffic". This is all set within the context of "the globalization of transport, accompanied by the emergence of transnational transport companies which in turn affect the pattern of trade".

This immense unsatisfied demand for mobility is causing what the ERT term "rationing by congestion" — traffic jams,



airport queues and so on. The answer, they contend, is to undertake a "rapid overhaul of Europe's communications infrastructure" which they say should be "top of the European agenda".

The accent of their proposals is on "new links between centres of activity and/or communications nodes, be they airports, ports, or major data processing centres". They talk of "combined transport networks" and are at pains to avoid discussing any one form of transport in isolation. This does not stop them advocating the need for more roads to breach the "Alpine and Pyrenean barriers" or to replace the "shortage of highways connecting Eastern Europe". But the accent of the publication is on transport infrastructure, rather than roads.

Indeed, there is a considerable emphasis placed upon the modernization of the railways, though not for any

environmental reason. On the contrary: "Environmental concerns act more as an obstacle [to high-speed rail] than as an incentive, in spite of substitution for road and air transport." When infrastructure is top of the agenda, environmental concerns become an obstacle.

Another obstacle identified by the ERT is local resistance. The Single Market's "new logic does not apply only to long-distance transport. The hierarchy between local communications and the larger network is also affected." For example, "a local railway station may become a hub in a cross-national network . . . The benefits are often widespread while the costs are typically borne locally." Particularly worrying for the ERT are Switzerland and Austria, who are not overjoyed at the prospect of being used as a trans-European corridor, and whom the ERT fears "may become spokesmen of 'local' interests."

The ERT recognizes that "technocratic designs . . . which ride roughshod over the legitimate concerns of others, will simply founder on the obstacles of local resistance." But this does not mean that it is prepared to allow communities to decide what they want for themselves: "Environmental objections, while important, cannot be simply granted a power of veto . . . The increasingly effective organization of those arguing for environmental citizen's rights must be matched by a more effective organization of the advocates of change, adaption and growth."

The transnational corporations that make up ERT present *Missing Networks* as a "pilot study" for just such an organization, which will act as a "friendly and informed 'watchdog' over European, national and municipal authorities". Its object will be to ensure the future of "Europe's Infrastructure . . . a single interacting system or mega-network with a single output: mobility."

- IRF — The International Road Federation, umbrella organization for European road lobby groups such as the British Roads Federation;
- IRU — the International Road Union, based in Geneva;
- PIARC — the Permanent International Association of Road Congresses, grouping national highway authorities, such as the UK Department of Transport;
- ERT — the European Round Table of Industrialists, based in Brussels;
- ACEA — the main European umbrella organization representing the motor traders;
- ITA — the International Tourism Alliance;
- SECAP — the association of concessionaires for toll motorways.

The Motorway Working Group was made up entirely of road and industry organizations with an interest in getting large numbers of new motorways built. One of these organizations,

the ERT, has been crucial since 1984 in providing not only the arguments but also much of the language and even the cartography for what it calls *The Missing Links* in European infrastructure (see Box above).

## Talking Economics

The power of the European road lobby, however, is being challenged in Brussels by a growing environmental lobby. The European Environmental Bureau (EEB) enjoys recognition and financial support from the Commission. Friends of the Earth, Greenpeace and the World Wide Fund for Nature (WWF) all have active Brussels offices. The European Federation for Transport and Environment (T&E), founded in 1990, has been growing and now has an office in Brussels. And there are 28

# European Motorway Proposals

*Because the most "obvious" motorways have already been built in many European countries, new road proposals are more likely to threaten residential or environmentally sensitive areas. The following are examples of road schemes in Western and Central Europe that will not only be environmentally damaging but which seem to fly in the face of common sense.*

## • A9 Pyhrnautobahn (Austria)

The Pyhrn motorway would cut through central Austria roughly from Linz to Graz, as part of the main north-west to south-east axis across central Europe, running from Nuremberg to Zagreb. The proposal almost duplicates the existing Tauern and West motorways, which already accommodate a lot of north-west/south-east traffic, and there are four concurrent railway lines with spare capacity. There has been opposition to the scheme for nine years which has been aided by scandals in the Pyhrn motorway company, whose chairman was arrested on corruption charges. Construction of the southern end of the motorway is currently suspended, but the Austrian government, under pressure from Brussels, wants to resume work on it.

Protests are coordinated by: Netzwerk Pyhrn; contact person: Arthur Freund, Hausmanning 28, 4560 Kirchdorf, Austria. Tel: +43 7582 51752.

## • Scan-Link Bridges (Denmark to Sweden)

In 1991, the Swedish and Danish governments agreed to construct a bridge across the Öresund, while the Danes are constructing another across the Great Belt. These two sounds are the only outlets of the Baltic Sea into the Atlantic, and according to a Swedish and Danish government survey, the bridges will restrict the flow of water by 17 per cent. Over 100 scientists have protested against the scheme, fearing that it will disrupt the Baltic Sea's ecosystem. Critics allege that the bridge gives an unnecessary stimulus to car traffic in an area which can be easily and adequately served by ferries. Contact Miljöförbundet, PO Box 7048, S-402 31 Stockholm, Sweden. Fax: +46 31 121817.

## • RN 134 Pau (France) to Zaragossa (Spain)

Officially, this is just a road tunnel, but politicians on both sides of the Pyrenees talk frequently of "the new highway", linking the Iberian peninsular. There has been an outcry over the impending destruction of the unspoiled Vallée d'Aspe, home to the last of Western Europe's bears. A disused rail tunnel (the Somport tunnel) already exists under the valley; it was closed 20 years ago after a minor accident. The cost of reopening it would be about a tenth of that of a new road tunnel.

Protests are being coordinated by: Sepanso (Section Béarn); contact, Alain Arraou and Geneviève Saule, 2 rue du Tilleuil, 64400 Gurmenáon, France. Tel: +33 5902 7962 or 5939 5850, Fax: +33 5934 5395.

## • A51 and A75 (France)

The A51 will run north-south from Beaune (just south of Dijon), through the French Jura mountains, under Grenoble in a 30 kilometre tunnel and across the Savoy Alps to Sisteron. Campaigners are convinced it would not be built if road transport had to pay its full costs.

The A75 will run parallel to the A51 through the middle of the Massif Central mountains, from Clermont Ferrand to Montpellier. Cuttings, embankments and viaducts up to 300 metres high will demand massive state subsidies. The road is being advertised as a way of bringing development

to a depressed area. But, like the A51, its main purpose will be to funnel traffic away from the congested A6 motorway between Marseilles and Lyon, the axis between the manufacturing zones of the North and agricultural areas of the Mediterranean.

Protests against the A51 are being co-ordinated by Frapna Isère, contact Pierre Planeix, Tel: +33 7642 6408, Fax: +33 7651 2466.

## • A20 Baltic Coast Motorway (Germany)

This 300-kilometre motorway, proposed by the now disgraced German transport minister, Günther Krause, runs eastward from Lübeck to Szczecin just inside Poland. The cost in the late 1980s was estimated at around £1.5 billion, but this does not include any work to reduce the environmental impact. It is expected to create employment, but as few eastern German building firms have the necessary machinery, much of the labour will be provided by western German firms. Critics of the motorway, who include the Federal Environment Office, point out that the A20 forms no part of any transport concept, and describe the Environmental Impact Assessment as a farce.

Protests are being coordinated by: Aktionsbündnis "Keine A20", Grosser Moor 2-6, Postfach 251, O-2751 Schwerin, Germany. Tel: +49 385 864893.

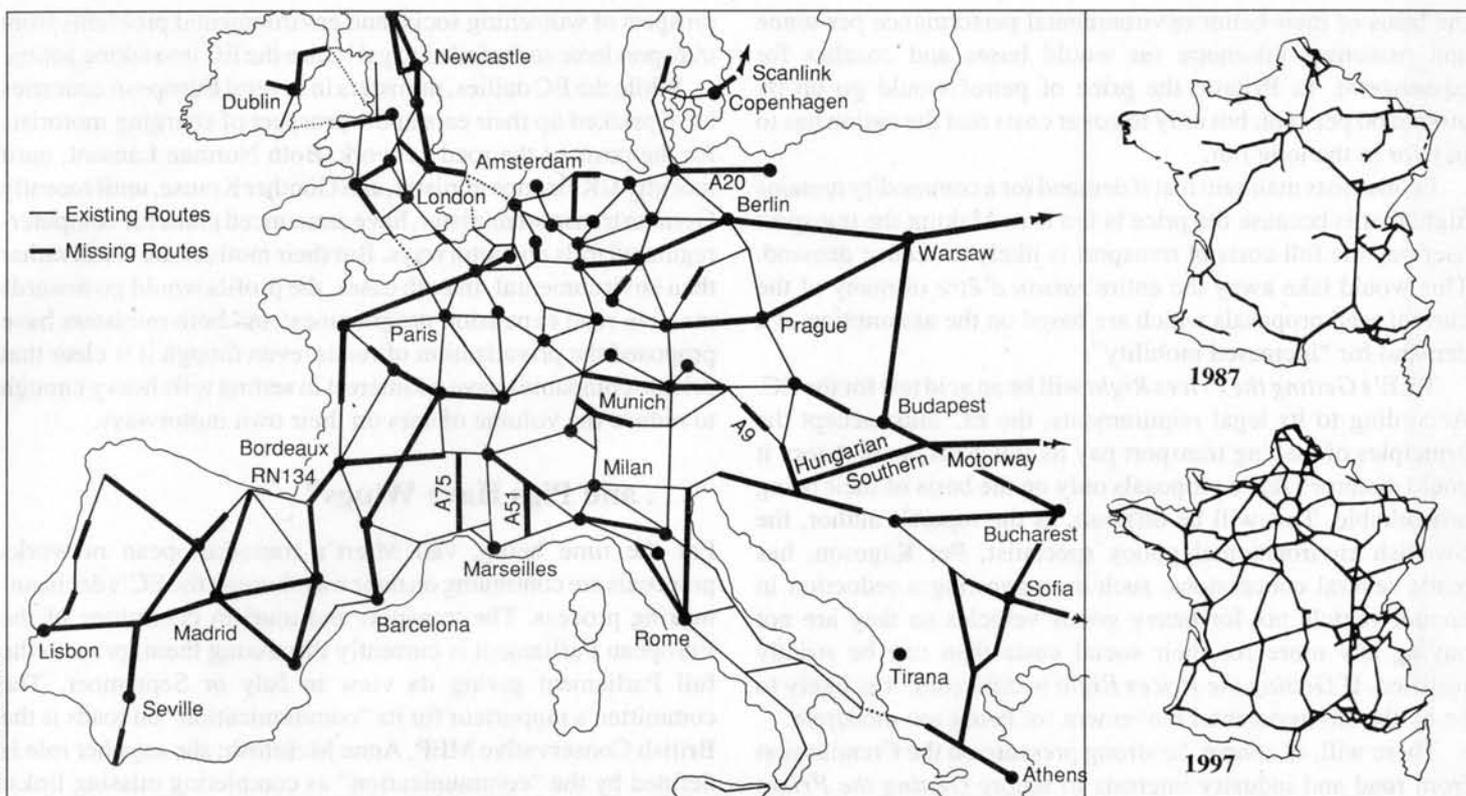
## • TEM (Eastern Europe)

Road expansion in Eastern Europe is mainly incorporated within a network known as the Trans-European North-South Motorways (TEM). The project, which involves over ten countries, was inaugurated in 1977 with funds from the United Nations Development Programme. Of the 10,970 kilometres planned, some 2,800 have been built so far.

In 1991, the plan was extended to take account of the massive anticipated increase in traffic on the East/West axis following the collapse of state socialist regimes. Traffic had already been increasing at a phenomenal rate throughout the 1980s: 800,000 goods vehicles crossed Hungary in 1980 compared to 100,000 in 1989, and an even greater increase is expected in the future. In Germany, according to Günther Krause, North/South traffic is expected to double by 2010, while East/West traffic is expected to multiply by a factor of 25.

## • Southern Hungarian Motorway.

In Hungary, an Italian/Hungarian joint venture called Southern Highway Limited is attempting to build a private toll motorway that would cross the country to link Austria with the Ukraine. The company has been lobbying local municipalities to enlist their support, promising that the road will bring them Western-style development. The mechanisms now operating in Hungary to boost road-building are a mirror image of those that have existed over the last 50 years in the West. Says environmentalist Vera Mora: "The politicians are focused on a boom and they see more roads as a way of stimulating it. The car lobby is stronger than any other interest group in Hungary. The railway company, however, is getting less in subsidies than roads and the price of train tickets keeps rising."



The map of Europe shows some of the main routes identified as "missing links" in the transcontinental road network. The intensity of national motorway grids will be even higher, as can be seen in the comparison between France's motorways in 1987 and those expected to be completed by 1997.

Green Members of the European Parliament. Any of these could have contributed to the MWG's work but were not asked.

These organizations have started to question the desirability of economic growth. But they also find it diplomatic to talk to the Commission in its own language and prefer to point out the simplistic nature of the connection made between economic growth and mobility. According to Arie Bleijenbergh of the T&E, the link between transport and the economy is more complex than it seems: insufficient distinction is made between the economic interest of the transport sector, the economic interest of a national government acting as a business enterprise, and the economic interest of an optimum allocation of scarce resources. "Failure to understand this distinction results in a fuzzy discussion of what aspects of transport are economical or uneconomical and makes national governments make decisions for economic reasons that do not stand up to close analysis."<sup>8</sup>

This is the sort of language that the free-market economists in Brussels can understand. A basic tenet of the free market is the absence of distortions of competition, and the EC has a formal responsibility under the Treaty of Rome to eliminate distortions. One of the biggest distortions is state subsidy, yet national governments and the EC are subsidising road transport by failing to make transport users pay the full costs of the facilities.

In Britain, for example, the government's income from road transport taxation was £13,825 million in 1991. The direct costs of the road infrastructure in the same year came to £5,625 million, leaving a supposed surplus of £8,200 million which allows the road lobby to argue that roads are "economical" and that the motorist is overtaxed. But this calculation takes no account of damage to the environment or to national heritage, of social inconvenience caused by factors such as noise or restriction of children's liberty, and a host of other factors such as accidents, tax relief on company cars, and free parking. If these externalities are taken into account, the Environmental Transport

Association conservatively estimates the full cost of motoring to be £19,785 million a year.<sup>9</sup> This leaves a deficit from motoring taxes of just under £6 billion, which is in effect a state subsidy for motoring. In another study, based on calculation of the rentable value of the road network, the fervently free-market Tory Green Initiative estimated the deficit to be £9 billion a year.<sup>10</sup>

These subsidies exist to a greater or lesser extent across Europe, and the EC is slowly becoming sensitive to the fact that they contravene the Treaty of Rome. In the December 1992 White Paper on the future of the Common Transport Policy, paragraph 345 says: "On the harmonization side, the main emphasis will be on the development of a Community framework for the charging of infrastructure and other costs to users. Such a framework is the essential foundation for the realization of the objective of sustainable mobility for the Community as a whole." And in paragraph 346: "In the short term, emphasis will be placed on . . . the imputation of infrastructure costs . . . In the medium term, proposals will need to be made concerning charging for externalities so that environmental problems will be addressed by the fundamental economic mechanisms at work in the transport sector."

### Getting the Price Right

Until now, the Commission could perhaps have claimed it did not know how to get transport users to pay for the full costs of transport. In June 1993, however, the European Federation for Transport and Environment (T&E) published a report *Getting the Prices Right*,<sup>11</sup> which not only assesses the costs currently not paid for by users and operators, but for the first time proposes a series of models for getting the polluter to pay.

The proposals would mean a different price structure for transport. By creating a level playing field between road and rail, the railways would enjoy considerable price advantages on

the basis of their better environmental performance per tonne and passenger kilometre (as would buses and coaches for passengers). In Britain, the price of petrol would go up by around 60 per cent, but only to cover costs that the nation has to pay for in the long run.

Economists maintain that if demand for a commodity remains high, that is because the price is too low. Making the transport user pay the full costs of transport is likely to reduce demand. This would take away the entire *raison d'être* of many of the current road proposals which are based on the assumption of a demand for "increased mobility".

T&E's *Getting the Prices Right* will be an acid test for the EC. According to its legal requirements, the EC must accept the principles of making transport pay its full costs, so in theory it could dismiss T&E's proposals only on the basis of their being unworkable. This will be difficult, as the report's author, the Swedish environmental policy specialist, Per Kägeson, has made several concessions, such as suggesting a reduction in annual vehicle tax for heavy goods vehicles so they are not paying any more for their social costs than can be strictly justified. If *Getting the Prices Right* is criticized, it is likely to be by the environmental movement for being too moderate.

There will, of course, be strong pressure on the Commission from road and industry interests to ignore *Getting the Prices Right* and continue as usual. The admission by the Commission that the EC is now unlikely to achieve its modest CO<sub>2</sub> stabilization target — a return to 1990 levels by the year 2000 — has done nothing to speed up agreement on the proposed tax on energy or CO<sub>2</sub> which has been under discussion for nearly two years.<sup>12</sup> The

prospect of worsening social and environmental problems from transport have so far failed to galvanize the EC into taking action.

While the EC dallies, ministers in several European countries have pricked up their ears at the prospect of charging motorists for the costs of the road network. Both Norman Lamont, until recently UK finance minister, and Günther Krause, until recently German transport minister, have announced plans for computer-regulated tolls on motorways. But their motives are fiscal rather than environmental. In both cases, the profits would go towards massive road expansion programmes; and both ministers have proposed the privatization of roads, even though it is clear that private companies have no interest in setting tolls heavy enough to reduce the volume of cars on their own motorways.

### "... and Pigs Have Wings"

For the time being, van Miert's trans-European networks proposals are continuing on their way through the EC's decision-making process. The transport and tourism committee of the European Parliament is currently discussing them, prior to the full Parliament giving its view in July or September. The committee's rapporteur for its "communication" on roads is the British Conservative MEP, Anne McIntosh; she says her role is defined by the "communication" as completing missing links: "I have to look for motorways that peter out short of a port or in similar circumstances, so I am asking all members to check the map to see which bits of the road network have been missed out. The aim is not so much to create new roads but to improve existing ones so they become the necessary links."<sup>13</sup>

Asked if she was not concerned about the environmental impact of building or "improving" roads, she said she was anxious to ensure that transport policy relates to the environment, that environmental impact assessments are observed, and that the best thing would be to get people into coaches or trains. She added: "Our proposals are not going to generate more traffic but to accommodate existing traffic, for example that created by increased activity at ports and airports." When put to her that this runs contrary to experience — the M25 runs close to her Essex constituency — she asserted: "Building new roads or widening existing ones doesn't generate new traffic."

McIntosh's reply is typical of those at Brussels who are beginning to recognize that transport policy must somehow be made "sustainable", but are reluctant to confront the roots of the problem. The race is now on between those who want to see these roads built as quickly as possible and those intent on getting the Commission to recognize that road building is creating enormous problems for the future.

### References

1. *Missing Networks*, European Round Table, Brussels, 1991.
2. Commission of the European Communities, COM (92) 231.
3. Treaty on European Union (Maastricht Treaty), articles 129b-d.
4. Interview with the author, 1993.
5. Commission of the European Communities, COM (92) 494 final, par. 23 and 28.
6. Commission of the European Communities, COM (92) 48 final, par. 79.
7. "The Battle of Twyford Down", *Dispatches*, broadcast on Channel Four Television, UK, 17 February, 1993.
8. Bleijenberg A.N., *Transport, Economy and Environment*, Centre for Energy Conservation and Environmental Technology, Delft, 1992.
9. *The Real Costs of Motoring*, Environmental Transport Association, Weybridge, UK, November 1991.
10. Linnett, S. et al., *Taken For A Ride*, Tory Green Initiative, London, 1991.
11. *Getting the Prices Right — a European Scheme for Making Transport Pay its True Costs*, European Federation for Transport and Environment, T&E 93/6 and 93/7, June 1993.
12. Commission of the European Communities, COM (92) 226, 1992.

You don't support  
the government's  
motorway building  
programme...  
...but you know  
a man who does.

The AA and RAC are not just breakdown companies — they are powerful lobbyists for the road building programme\*.

You may want a breakdown service without supporting the road lobby.

The Environmental Transport Association was formed with backing from WWF and other environmental groups to provide a breakdown service second to none for people who care for their local and global environment.

The ETA campaigns for safe, pollution free town centres and excellent public transport. In other words an environmentally sound transport policy for Britain.

Join today for a safer and greener environment

**Phone 0932 82 88 82 anytime**

ETA, The Old Post House, Heath Road, Weybridge, England KT13 8RS

\*The AA and RAC both lobby the government directly and are members of the British Road Federation which campaigns energetically for more motorways and main roads.

# Time Pollution

by  
John Whitelegg

*Although time-savings provide the principal economic justification for new road schemes, the expansion of the road network and the increase in traffic does not seem to have given people more free time. This is because pedestrian time is not evaluated, because cars are deceptively time-consuming, and because people tend to use what time savings they do gain to travel further.*

Time is money, we are told; and increasing mobility is a way of saving time. But how successful are modern transport systems at saving time?

Michael Ende's novel *Momo*<sup>1</sup> describes the changes which took place in the daily lives of a small community when "time thieves" persuaded the residents to save time rather than "waste" it on idle conversation, caring for the elderly and similar social activities. The effects were dramatic: as the traditional café was converted into a fast-food outlet and other changes took place, people were too busy saving time to find any time for each other. The village barber found that:

"he was becoming increasingly restless and irritable. The odd thing was that, no matter how much time he saved, he never had any to spare; in some mysterious way, it simply vanished. Imperceptibly at first, but then quite unmistakably, his days grew shorter and shorter. Almost before he knew it, another week had gone by, another month, and another year, and another and another."

Ende's novel compresses into a few months the process of community disintegration that has been taking place over the last few decades in Europe. The observation that "no one has any time for each other any more" is a commonplace, particularly among older people; yet there are few attempts to examine why this should be so. How can we explain the Momo effect, the paradox that the more people try to save time, the less they seem to have? In other words, what do people do with the time they save?

## More Speed, Less Access

The work of Torsten Hagerstrand over the last thirty years is an important but neglected contribution to the understanding

of people's use of space and time.<sup>2</sup> He suggests that the ability to make contact with places and other people is the central organizing feature of human activity and that it is ease of access to other people and facilities that determines the success of a transportation system, rather than the means or the speed of transport.

---

*"The odd thing was that, no matter how much time he saved, he never had any to spare."*

---

It is relatively easy to increase the speed at which people move around, much harder to introduce changes that enable us to spend less time gaining access to the facilities that we need.

On this important matter there are very few indicators which can reveal how well our transportation systems are performing in the 1990s, by comparison (for example) with the 1920s. What is without doubt is that facilities are sited further apart and that people have to travel further than they did 70 years ago to reach them. In their home territories, they must travel further to supermarkets or leisure facilities and often must cover some distance while looking for somewhere to park. In their work, they must be prepared to commute further afield to find jobs. In their leisure time people contemplate day trips to Brussels, Paris or Stockholm when previously they would have thought the idea ridiculous.

C. Marchetti has shown that the amount of time each person devotes to travel is roughly the same regardless of how fast or how far they travel. "When people gain speed they use it to travel further and not to make more trips. In other words most individuals treat their territory the same way whatever size it is."<sup>3</sup> Those who use technology to travel at greater speeds still

have to make the same amount of contacts — still work, eat, sleep and play in the same proportions as always. They simply do these things further apart from each other.

Do they do so by choice or through obligation? A circular logic operates here. While the distances between hospitals, schools, shopping centres and the like have risen, nothing can be done to increase the number of hours in the day. Speed must therefore be increased, and investments are made in quicker forms of transport — families buy faster cars, governments build faster roads and railways. But the time savings promised by new motorways and high speed trains appear to release time for more travel and thus spur the consumption of distance to ever higher levels of achievement. When people save time, they use it to buy more distance.

## Social Speeds

The suggestion that people spend about the same amount of time travelling, whatever their mode of transport, does not, however, explain the Momo effect: many people feel they have *less* time than they had before, despite faster means of transport.

There is another hidden time factor in the equation. Motor cars and other high speed vehicles do not save as much time as they appear to, as Ivan Illich pointed out in 1974:

"The typical American male devotes more than 1,600 hours a year to his car. He sits in it while it goes and while it stands idling. He parks and searches for it. He earns the money to put down on it and to meet the monthly instalments. He works to pay for petrol, tolls, insurance taxes and tickets."<sup>4</sup>

Elaborating on Illich's observations D. Seifried<sup>5</sup> has coined the term "social speed" to signify the average speed of a vehicle, once a number of these hidden factors have been taken into account (*see*

Dr. John Whitelegg is Head of the Geography Department at Lancaster University and an international transport and environment consultant.

Table 1). According to Seifried, the social speed of a typical bicycle is 14 kilometres per hour (kph), only three kph slower than that of a small car. If other external costs (air and noise pollution, accident costs, road construction costs and so on) are taken into account as well, then the small car is one kph slower than the bicycle.

Thus the owner of a small car who spends 30 minutes per day driving 20 kilometres may feel that she is travelling faster than a bicyclist who spends the same time covering seven-and a half kilometres. But when the social speed is taken into account, it emerges that the car owner is likely to be spending 70 minutes per day while the bicyclist is spending only 32. *Ecce Momo!*

### Space Pollution

Whereas speed consumes distance, a mode of transport occupies space — and the faster the mode of transport the more space it requires. According to a 1985 Swiss study,<sup>6</sup> a car travelling at 40 kph requires over three times as much as space

as a car travelling at 10 kph (see Table 2, p.134). Furthermore the “bodywork” often associated with high speed vehicles demands space even when the vehicle is travelling slowly: a single person in a car travelling at 10 kph requires six times as much space as a person riding a bicycle at the same speed.

Space therefore has to be consumed in large quantities to provide the infrastructure for high speed travel, as can be witnessed in the land requirements for new motorways, high speed rail routes and airports. Roads designed to carry traffic at speeds over 120 kph take up more land than roads designed for lower speeds, and the same is true for high speed rail — fast cars and trains cannot take tight bends. Urban motorway and “relief” road construction is the ultimate expression of space sacrificed for speed.

When the demand for space is not met at certain points in the network, the result is congestion — the familiar situation where cars costing up to £20,000 and designed to travel at 175 kph cannot average speeds much above 20 kph. The current enthusiasm for charging motorists for their use

of road space through toll roads and electronic road pricing arises out of a hope that it will ease congestion. Traffic flow on these roads can be regulated by adjusting the level of the toll. This will save time for one group (wealthy motorists) at the expense of other groups (such as poor car-owners or pedestrians) and at the expense of greater levels of space inefficiency. Table 2 shows that in terms of space efficiency, the car is extremely wasteful. Paying for that space does not alter this equation.

### Time Thieves

As higher speeds lead to greater distances between facilities, people overcome this distance either by allocating more time to travel or by gaining access to modes of transport with higher speeds. The result of both has been an accentuation of social differences. While those with access to high-performance cars and regular transcontinental air flights have seen their radius of activity expand immeasurably over the last few decades, that of an unemployed black resident of London or an elderly person in Montgomery, Alabama, for instance, may be no greater than that of an urban resident 100 years ago. The poor and unemployed, whose time is valued very low, are expected to find the time to devote to travel; the rich have the money to buy travel and are more likely to do so because their time is considered more valuable. The more emphasis put on time savings, the more the whole transport system becomes skewed to serve a wealthy élite.

Transport policies and policies which influence location and accessibility of basic facilities steal time from different groups in society and reallocate it to (usually) richer groups. The relocation of shops, hospitals and schools at a greater distance from the community that needs them imposes serious time penalties on other users. Those without cars (still about 35 per cent of the UK population) and those without access to them during the day must spend more time searching for other facilities, waiting for buses, waiting for friends to give them lifts, or walking.

Among the groups particularly affected in a male- and car- dominated planning system are women, children, the elderly and the infirm. For women travelling alone after dark, there are potentially serious consequences arising from waiting at bus stops or for late trains or for using another device designed to maximize vehicle

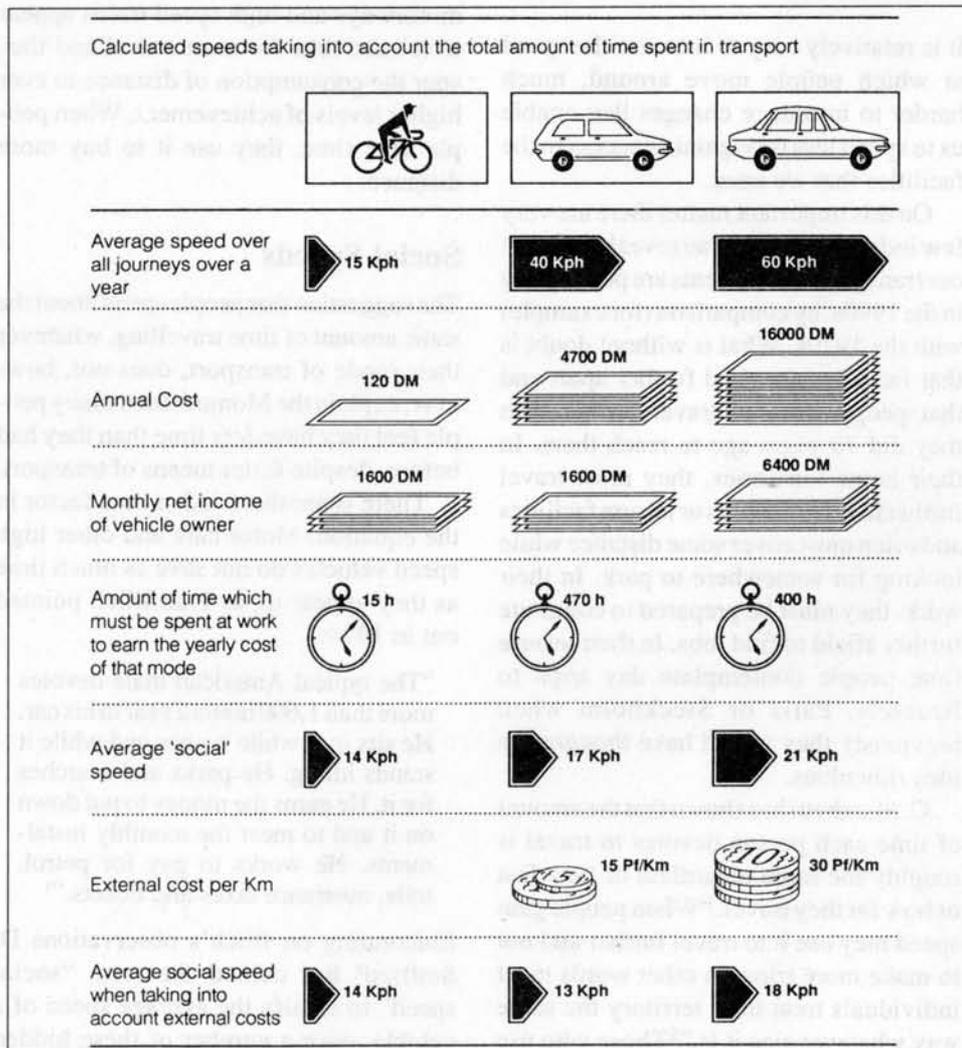
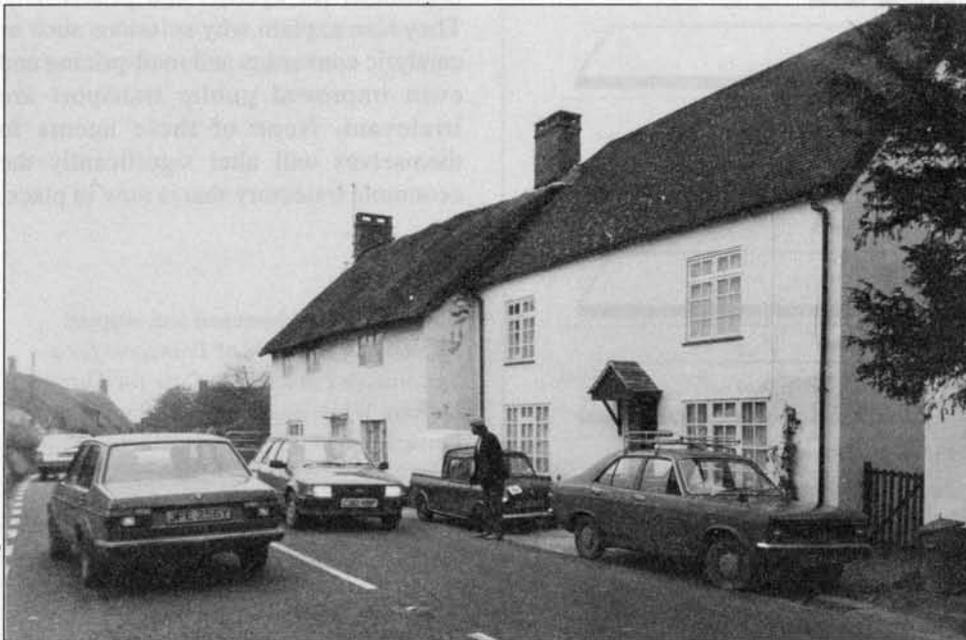


Table 1: Average social speeds of the bicycle and the car

Left: A Wiltshire village in the early 20th century. The sign on the far left says "Danger Motorists Caution". The veranda, indicates time to spare, and a congenial street life.

Below: The same view in 1988. The motor car has usurped both space and time: the veranda has been replaced by a parking place.



Nikki Houghton

convenience at the expense of pedestrians: the underpass. Women are more likely to be bus users than men, more likely to be in charge of young children in dangerous pedestrian environments and more likely to be involved with escorting duties arising from the unacceptability of letting children walk unsupervised in environments rendered lethal by traffic. In Britain, women spend many thousands of hours escorting children in an environment rendered unsafe for children, mainly by men. Using Department of Transport (DOT) methods of valuation, the cost of this escorting has been estimated at over £10 billion.<sup>7</sup> If this cost had been taken into account the planning process would have produced a different outcome.

### The Price of Time

The provision of high quality urban roads, large car parks and (soon) in-car navigation is dependent upon a high valuation of the time of the car occupant. Road schemes in Britain are justified by assigning a monetary value to the time they will save for motorists. The author of one study<sup>8</sup> describes an urban road construction and improvement scheme in Leicester where time savings made up 96.4 per cent of the gross benefits in the DOT's cost-benefit evaluation (COBA). The average time savings over several projects was 90 per cent of the value of the benefits. Where the proposed road might block pedestrian movements or require

an increase in the time devoted to escorting children, this was not offset against the time gained. Nor was attention given to the question of how this newly-won time might be reallocated in an economically productive way to justify the assignment of monetary values.

The Leicester study also revealed that most of these predicted time savings for motorists were very small, in the order of five minutes or less. It calculated that when the value given by COBA to each time-saving of less than three minutes was reduced by 75 per cent, the estimated first year rate of return of the scheme fell from 20 per cent to five per cent — a rate of return that would cast severe doubts upon the financial viability of the project. Time savings of three minutes are likely to fall within the routine variability of any journey and cannot be easily be reallocated to "useful" time. Furthermore, in any road scheme there will be innumerable other repercussions which take up three minutes — the time taken by pedestrians to make a detour through an underpass, for example. The monetarization of motorists' time savings is a convenient fiction that enables the evaluation process to come up with the desired answer — build the road.

If putting high values on the time of drivers, even down to very short periods, leads to more road building, putting a high value on the time of cyclists and pedestrians would restructure present transport systems. Traffic would have to give way to pedestrians so as not to delay

them, purpose-built pedestrian and cycle facilities would win new investment, and proposals that encouraged pedestrians to linger and make use of space whilst slowing down traffic would gain precedence. This is encouraging a "waste of time" and might be seen to imply that motorists' time should have a negative value. But allocating a negative value to motorists' time-savings is no less ridiculous than current practices and would encourage cities and villages to develop as social, productive, enjoyable and secure places.

## Maintaining Community

Jane Jacobs account of city life in the US some thirty years ago<sup>9</sup> shows how important ordinary but diverse contact is to people's well-being. Maintaining a sense of community needs an investment

of time and energy in contact with neighbours and local groups. The opportunities for such contact depend on time available and thus on priorities. The decision to travel longer distances (and save time at higher speeds) means that little time is available for interaction with neighbours and so there is less chance of a genuine community developing or maintaining itself.

Motorists not only restrict their own lives in this respect, but also those of other people. Detailed studies on the effect of traffic volumes upon different street communities in San Francisco<sup>10</sup> showed, unsurprisingly, that streets with heavy traffic have relatively little social interaction; residents of streets with light traffic had three times as many local friends and twice as many acquaintances as did residents of busy streets

Time is central to notions of sustainability. A sustainable city or a sustainable transport policy or a sustainable economy cannot be founded on economic principles which, through their monetarization of time, orientate society towards higher levels of motorization, faster speeds and greater consumption of space. The fact that these characteristics produce energy intensive societies and pollution is only part of the problem. They also distort value systems, elevate mobility above accessibility, associate higher speeds and greater distances with progress and dislocate communities and social life.

Sustainability involves significant changes in the way markets operate and the ways individuals behave. Time valuation is one area ripe for change. Current methods of valuation provide an economic rationale for more travel and more pollution and justify the poor conditions for cyclists and pedestrians. They also explain why solutions such as catalytic converters and road-pricing and even improved public transport are irrelevant. None of these agents in themselves will alter significantly the economic trajectory that is now in place.

This article is a shortened and adapted version of Chapter V of *Transport for a Sustainable Future: The Case for Europe*, by John Whitelegg, published by Belhaven Press, London, 1993, price £12.99.

## References

1. Ende, M., *Momo*, Penguin, London, 1984.
2. Hagerstrand, T., "Space, Time and the Human Condition", in Karlquist, A., Lundquist, L. and Snickars, F., (eds.) *Dynamic Allocation of Urban Space*, Saxon House, Lexington, MA, 1975.
3. Marchetti, C., *Building Bridges and Tunnels: the Effect on the Evolution of Traffic*, Document SR-88-01, International Institute for Applied Systems Analysis, Vienna, 1981.
4. Illich, I., *Energy and Equity*, Marion Boyars, London, 1974.
5. Seifried, D., *Gute Argumente: Verkehr, Beck'sche Reihe*, Beck, Munich, 1990.
6. Navarro, R.A., Heierli, U. and Beck, V., *Alternativas de Transporte en America Latina: la Bicicleta y los Triciclos*, SKAT, Centro Suizo de Tecnologia Apropiaada, St Gallen, Switzerland, 1985.
7. Hillman, H., Adams, J. and Whitelegg, J., *One False Move: a Study of Children's Independent Mobility*, Policy Study Institute, London, 1990.
8. Sharp, C.H., *Transport Economics*, Macmillan, London, 1973.
9. Jacobs, J., *The Life and Death of American Cities*, Pelican, London, 1961.
10. Appleyard, D., *Livable Streets*, University of California, Berkeley, 1981.

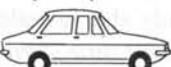
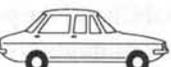
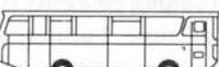
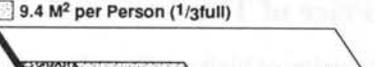
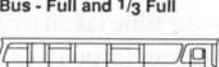
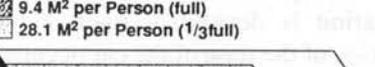
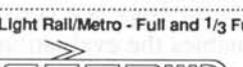
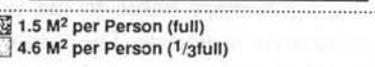
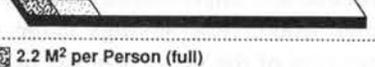
Transport Mode	Speed	Space required per person
 Pedestrian		0.8 M <sup>2</sup> per Person 
 Cyclist		3 M <sup>2</sup> per Person 
 Fully Occupied Car		6.2 M <sup>2</sup> per Person 
 Fully Occupied Car		20 M <sup>2</sup> per Person 
 Car with 1 Person		18.7 M <sup>2</sup> per Person 
 Car with 1 Person		60 M <sup>2</sup> per Person 
 Bus - Full and 1/3 Full		3.1 M <sup>2</sup> per Person (full) 9.4 M <sup>2</sup> per Person (1/3full) 
 Bus - Full and 1/3 Full		9.4 M <sup>2</sup> per Person (full) 28.1 M <sup>2</sup> per Person (1/3full) 
 Light Rail/Metro - Full and 1/3 Full		1.5 M <sup>2</sup> per Person (full) 4.6 M <sup>2</sup> per Person (1/3full) 
 Light Rail/Metro - Full and 1/3 Full		2.2 M <sup>2</sup> per Person (full) 6.9 M <sup>2</sup> per Person (1/3full) 

Table 2: Consumption of space by different modes of transport.

# Driving Roads through Land Rights

## The Colombian Plan Pacífico

by

Jon Barnes

*Although the Pacific region of Colombia, located at the crossroads of North, Central and South America, is rich in natural resources, it is the least economically developed area of the country. Over the past decade, however, it has become the target of ambitious schemes, not only to tap these resources, but also to serve as a trade platform for increased exports. Threatened by the gradual onslaught of the Plan Pacífico, the black and indigenous peoples of the region have formed scores of community organizations to demand their land rights.*

The Pacific region of Colombia bordering Panama and Ecuador has vast mineral and natural resources which have attracted outsiders since the Spanish Conquest 500 years ago. The area, 6.2 per cent of Colombia, is the country's main producer of platinum, the second main producer of gold, and contains considerable deposits of bauxite, manganese, tin, zinc, nickel, tungsten, copper and chromium, as well as possible reserves of oil.

With 5.4 million hectares of forest, the Pacific region accounts for around 60 per cent of Colombia's wood and paper pulp production. Its complex of vast river basins — the most important being the Atrato, San Juan, Patía and Mira rivers — offers a huge potential for hydroelectricity. The San Juan has the most water of all the Pacific Ocean's tributaries in South America.

The Colombian Pacific has one of the highest concentrations of plant and animal species, many of them unique life forms. This level of biodiversity is largely due to the region's equatorial location: condensation blown in from the Pacific Ocean by the trade winds is trapped by the Cordillera Occidental, the western range of the Colombian Andes, contributing to high levels of rainfall, between 5,000 and 12,000 millimetres each year. Temperatures of between 25°C and 30°C create a hot and humid climate.

The Cordillera Occidental also seals the Pacific region off geographically from the rest of the country; 80 per cent of the territory is tropical rainforest, fens, marshes, mangrove swamps and rivers.

**Jon Barnes** is a freelance journalist and writer on Latin America.



Ian Linden/CIIF

Such isolation and natural features, combined with the institutional weakness of the state, nationally and locally, have until recently discouraged an integrated official development strategy for the area. The construction of road "corridors" to the Pacific tended to be the main form of official development in the region. Colombia's main port, Buenaventura, handles 60 per cent of export cargo, particularly from the main coffee production zones inland in the central Andean region and from the industrial cities of Cali, Medellín and Bogotá, the capital.

Up to 90 per cent of the region's 900,000 people are black, the descendants of slaves brought from Africa between the 16th and 19th centuries to work in the Pacific gold mines, and some 10 per cent are indigenous peoples and *mestizos*.<sup>1</sup> Most of these inhabitants depend for their livelihoods on subsistence agriculture, hunting, fishing, forestry and

mining. They have an estimated per capita income of US\$500, less than half the national average and among the lowest in Latin America. Nearly 61 per cent of the population live in conditions of extreme poverty, exacerbated by inadequate housing and sanitary conditions, poor access to health and education, and state neglect of the region. The infant mortality rate is one of the highest in the world, over 150 per 1,000 in some areas; life expectancy is 55 years.

The indigenous communities, mainly the Embera and Waunana peoples, have a long tradition of organizing to win land rights, and have gained collective property rights to 61 *resguardos* (special reservations) covering 16 per cent of the Pacific area. The majority blacks, however, do not have legal title to the land surrounding the reservations, although they have lived there and managed it since Spanish colonial times.<sup>2</sup> Elite black involvement in local state and government structures or in logging companies adds to racial tensions between black and indigenous communities, inherited from the Spanish colonial caste system; outside élites often foster divisions to further their economic and political ambitions in the area.

### Predatory Neglect

Despite the lack of a systematic development plan until the mid-1980s, encroaching colonizers, loggers and mining companies wreaked havoc on the environment and among communities. Sharp land conflicts arose as the incomers, often

with the collusion of state officials, challenged the right of the black and indigenous communities to occupy land.

By 1984, over 1.5 million hectares of the Pacific Coast's forest had been destroyed for domestic wood and paper or to make way for agro-industrial production of African palm. The current annual rate of deforestation is 160,000 hectares, 2.2 per cent of total forest area each year.<sup>3</sup> The installation of commercial shrimp farms, particularly in the south, has caused a significant drop in mangrove coverage, while in the Urabá area, only small reserves of forest are left after the expansion of banana and star fruit production. Traditional agriculture, based on crop rotation, is under pressure from outsiders for the introduction of such monocrops, despite the low mineral content and poor drainage of the Pacific's fragile soils.

Uncontrolled gold mining has produced massive sedimentation in rivers and contaminated them with mercury, while the use of motorized equipment is eroding river banks, causing the river beds to drop, and threatening fish stocks and the ability of communities to travel or transport goods.

Such alien forms of economic production, and the cultural values accompanying them, have begun to erode the social and economic structures of the black and indigenous peoples, based on collective organization, mutual support, environmentally sustainable methods and a harmonious relationship with nature. Many members of the black and indigenous communities are now forced to participate in the very activities that damage their communities because of a lack of alternatives, while others have migrated to large urban centres or left the Pacific region altogether.

## The Plan Pacífico

After years of systematic indifference, ambitious development plans, known collectively as the Plan Pacífico, have been drawn up over the last decade to integrate the Pacific Coast with the rest of Colombia. The overall aim of the Plan Pacífico is not to involve the local people in improving living conditions or economic opportunities, but to prise open what one president called the country's "money box". Concealed behind references to fighting local poverty and protecting the environment is an attempt to gain more efficient access to the area so

as to exploit it more systematically compared with the chaotic and uncoordinated resource extraction of the past. Since the 1970s, Colombian leaders have dreamed of turning the country into the Japan of South America by developing the Pacific area into a trading platform with South-East Asia and the Pacific Rim countries.

---

### *Concealed behind fighting local poverty and protecting the environment is an attempt to prise open the country's "money box"*

---

The first Plan Pacífico, the Integral Development Plan for the Pacific Coast (*Pladeicop*), approved by the government in 1984 and financially supported by Unicef, was candid: "This extensive region contains immense forest, fishing, river- and sea-based mineral resources which the country requires immediately. At the same time, it represents an area of fundamental national geopolitical interest." The plan aimed to remove the "structural bottlenecks hindering regional development and holding back rapid growth".<sup>4</sup>

*Pladeicop* budgeted for an initial expenditure of almost US\$308 million on infrastructure—roads, hydroelectric and energy plants, and telecommunications networks—and forestry, fishing, agriculture and mining projects. Construction of a naval base at Bahía Málaga 50 kilometres north of Buenaventura was also proposed. The fact that this project was completed by the end of the decade at triple the original US\$22 million estimate indicates that the Colombian authorities were clearly determined to safeguard the Plan Pacífico against any social discontent.<sup>5</sup>

In 1987, President Virgilio Barco Vargas (1986-90), a US-trained civil engineer, added an array of ambitious projects involving US\$4.5 billion. In 1989, he claimed that:

"the opening towards the Pacific will serve to stimulate and expand the economies of the north, the centre, the east and the west of the country, allowing them to exploit their potential and resources to the maximum. [It would] offer a modern, dynamic and new dimension of the Pacific to the whole of Colombia, especially the areas that are already developed, in particular to Bogotá, the country's capital and financial and economic centre, to the industrial zones of Antioquia, to the main coffee regions, to the fertile agricultural areas of the

valleys of the Cauca and Magdalena rivers, to the banana areas of the northern coast, and to the plains of the Orinoco and the Amazon".<sup>6</sup>

The centrepiece of President Barco's plans was the construction near the Panamanian border of the *Puente Terrestre Interoceánico* (PTI), an overland bridge comprising a railway, motorway, canal and oil pipeline, crossing the Baudó mountain range and the Darién marshlands to connect two new superports, one in Cupicá on the Pacific coast, the other on the Gulf of Urabá. Free trade and industrial processing zones would be established near the new ports and at each end of the PTI. The canal component of the PTI would enable Colombia to rival or even replace the Panama Canal.

The PTI was complemented by major road-building plans to increase connections with the country's main centres of economic production, in particular the coffee producing areas to the south, and to boost links with other countries in the region, especially Panama and Venezuela.

President Barco also proposed linking Colombia with its former province of Panama through the *Tapón del Darién* (Daríen Gap), the 54-kilometre missing link of the northern route of the Colombian section of the Panamerican Highway (which extends from Alaska down to Cape Horn). The road would go through an area inhabited by Cuna Indians which is one of the Pacific's richest in flora and fauna. Pressure for roads to cross the Darién area to gain quicker access to the Pacific had also come from banana companies and producers in the Gulf of Urabá area.<sup>7</sup>

More feasible in the short-term, however, was another corridor road to the Pacific from Pereira, in the heart of the coffee producing areas, to Nuquí on the coast. But this too would be a key part of an expanding road network: it could be extended up the coast to Cupicá, the Pacific coast superport and PTI terminal, a potential rival to Buenaventura, and form part of a proposed southern route of the Panamerican Highway; it would provide a road link with Bogotá, and with La Dorada further north-east, from where transport to Venezuelan markets and access to the oil fields in the east could be gained.

Much of the Plan Pacífico drawn up by 1990 concentrated on developing the Chocó department, one of four administrative departments in the Pacific region, reflecting the desires of the élites of Antioquia. The Plan was prepared, how-

ever, by the regional development Corporation of Valle de Cauca (CVC); the élites of Valle de Cauca, a regional department partly in the Pacific region and a traditional rival of Antioquia, put forward their own plans to upgrade the Buenaventura port and build hydroelectricity plants.

## Mobilization

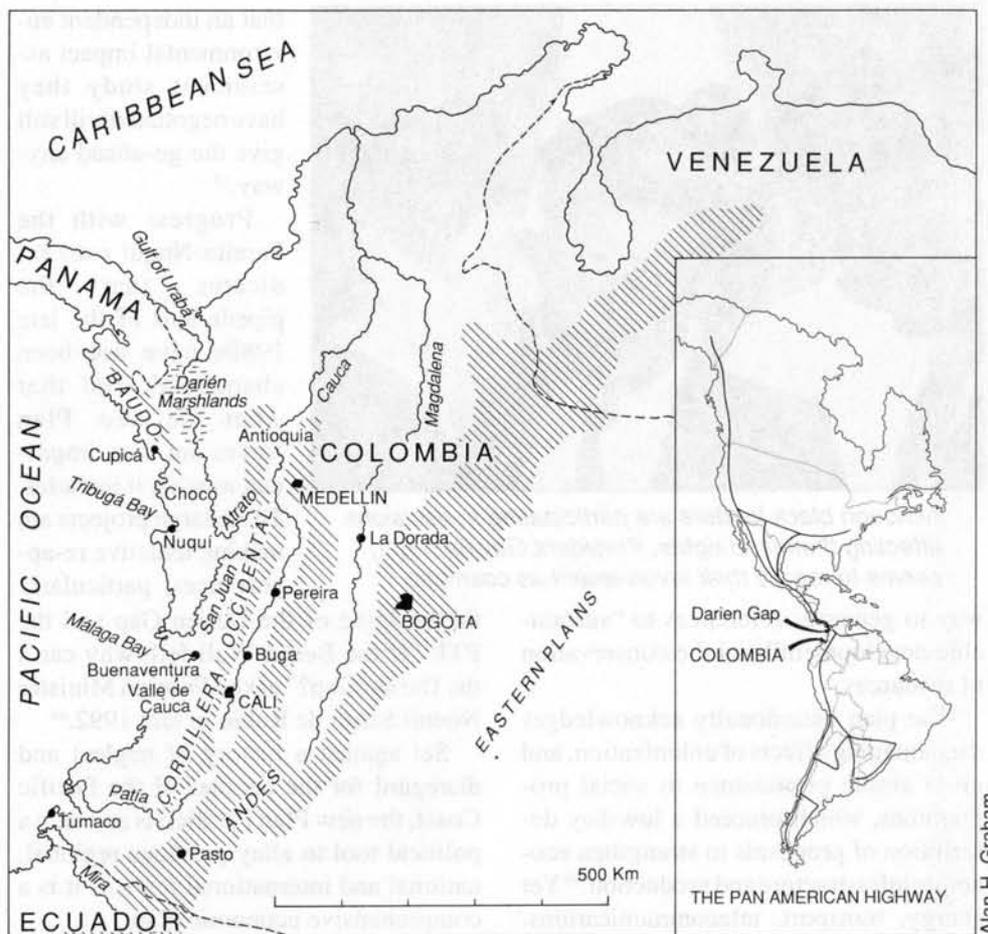
The Plan Pacífico generated massive expectations of opportunities to exploit still untapped resources. Loggers, mine owners and other interests stepped up their requests for land titles or operating concessions, bribing local officials and politicians or buying land at cheap prices from poor local residents.

Among the communities of the region, however, the Plan provoked widespread alarm. Threatened by even larger-scale environmental damage and the loss of their lands, black and indigenous peoples began in the 1980s to mobilize their communities in defence of their land, to win recognition for their rights and to overcome their mistrust of each other.

Various river-based, black peasant associations began to emerge as well as urban black organizations and broader movements to represent and coordinate their demands. These organizations received growing support from Orewa, the regional organization of the Embera and Waunana indigenous peoples.<sup>8</sup>

In the late 1980s, as part of their campaign, the black and indigenous communities joined in national pressure to overhaul Colombia's political system, dominated by the Liberal and Conservative parties for decades. "Our project is to cut the umbilical cord between our people's hunger and the traditional politicians' promises. We want to bring dignity to our people through a development of our communities which we control and manage," commented Otilia Dueñas, a black adviser to an indigenous parliamentary candidate.<sup>9</sup>

The 1990 election of a constituent assembly and the introduction of a new constitution in July 1991 created hopes of a "peaceful revolution". Article VII of the constitution recognized Colombia for the first time as a multi-ethnic and multi-cultural nation. The territorial rights of indigenous communities were inscribed in the new constitution as their collective inalienable property; they had the right to govern their land according to their own laws, customs and political traditions.



## Divide — Stall — and Rule

But equivalent rights were not granted to blacks. Transitory Article 55 of the new Constitution made collective land rights of "black communities which have been occupying vacant lands in the rural riverbank areas of the Pacific Basin" conditional on recommendations of a special parliamentary commission, based upon which Congress would approve the relevant legislation.

Reference to "vacant lands" was seen by blacks as a denial of their historical links with the land and a demonstration of state bias towards outsiders. The two-year delay while the commission pondered its recommendations would not be matched by a halt in development projects or colonizers' activities. Black leaders also pointed out that Transitory Article 55 was ambiguously worded — did it refer to the whole of the Pacific region, or only the land next to the riverbanks, leaving the surrounding areas of rainforest open to control by powerful outside interests? Would it exclude urban settlements and the communities of the Atlantic-bound Atrato River from the right to land?

Transitory Article 55 did, nonetheless, place black land rights on the political agenda and has provided an urgent focus

for continued pressure and mobilization, as well as being a powerful catalyst in the resurgence of black political awareness and sense of cultural identity.

## Imagined Reality

By the time of the constitutional reforms in 1990-1991, black and indigenous opposition had become a major obstacle to the implementation of the Plan Pacífico, while plans for the PTI and other huge projects had not got off the ground. Bureaucratic delays and confusion between central and regional authorities, and élite rivalry between Antioquia and Valle de Cauca had hindered implementation from the start, and despite considerable interest, substantial foreign investment had not been secured.

So a new, more modest Plan Pacífico, the "Pacific Plan: A New Strategy of Sustainable Development for the Colombian Pacific Coast", was launched by President César Gaviria Trujillo on 23 May, 1992 with a remarkably different tone from its 1983 predecessor. The large engineering projects, "which were not suited to the environmental and cultural reality of the Pacific" have apparently disappeared, while overt emphasis on the rapid exploitation of the Pacific has given



Although black leaders are participating in decisions affecting their land rights, President Gaviria (right) seems to regard their involvement as cosmetic.

way to generous references to “sustainable development” and the conservation of resources.

The plan occasionally acknowledges the damaging effects of colonization, and gives ample prominence to social programmes, which precede a low-key description of proposals to strengthen economic infrastructure and production.<sup>10</sup> Yet energy, transport, telecommunications, fishing, mining and forestry projects account for the largest share of the Plan’s modest total budget of almost US\$321 million for 1992-94.

The building of “corridor” port roads is still a priority in the 1992 Plan Pacifico. Most revealingly, it provides for the completion by 1993 of the much criticized and opposed Pereira to Nuquí road, a clear indication that the state intends to go ahead with construction of a new superport on the Pacific — the Tribugá bay near Nuquí has now been identified as the most likely site rather than Cupicá.<sup>11</sup>

As President Gavira’s political power base is Pereira, he must be fully aware of the impact of this road on communities and the environment, and support its construction, despite persistent protests. More migrants, whose access has been facilitated by the new road, are using their political connections and knowledge of legislation protecting colonists’ rights to gain land titles and remove blacks from their land.

The stretch of the road currently under construction, between the Pató river and the Baudó mountain range, is just 500 metres from going through a *resguardo* of the Emberas. “They have killed the river [Pató]”, said an Orewa leader of the silted up waters.<sup>12</sup> Although protesters have halted work by occasionally blocking the road, communities are worried

that an independent environmental impact assessment study they have negotiated will still give the go-ahead anyway.<sup>13</sup>

Progress with the Pereira-Nuquí road indicates that the pipedreams of the late 1980s have not been abandoned, and that what the new Plan leaves out is as important as what it includes. These large projects are making tentative re-appearances, particularly

the bridging of the Darien Gap and the PTI. “If the Berlin Wall fell, why can’t the Darien Gap?” asked Foreign Minister Noemí Sanín de Rubio in late 1992.<sup>14</sup>

Set against a history of neglect and disregard for the peoples of the Pacific Coast, the new Plan Pacifico is as much a political tool to allay previous regional, national and international fears as it is a comprehensive economic plan.

### Sustaining the Unsustainable

The Colombian government is confident that it can secure some US\$158 million in foreign support, nearly half the Plan’s budget. Over the last two years, it has been negotiating loans worth US\$86 million and US\$54 million with the Inter-American Development Bank (IDB) and the World Bank respectively. To win this funding, “sustainable development” has been made part of the official discourse. As a National Planning Department brochure explained: “Bilateral and multilateral bodies have conditioned their loans to the carrying out of environmental studies before the initiation of investment projects.”<sup>15</sup>

But the environmental soundness of the projects — or of the uses to which the funds will be put — is open to question. Much of the World Bank money, as well as funding for the upgrading of the Buga-Buenaventura road, the major export route for coffee,<sup>16</sup> will go towards the Forestry Action Plan for Colombia (launched in 1989 as part of the international Tropical Forestry Action Plan<sup>17</sup>), which emphasizes private commercial forestry, particularly in the Pacific area, using fast-growing species such as eucalyptus and pine.<sup>18</sup>

The UNDP is reported to be providing a global environmental facility (GEF) loan of up to US\$9 million, which, together with a US\$1 million IDB loan, will fund an inventory of flora and fauna in the Pacific region and an investigation of economic alternatives based on the “sustainable use of biological resources”. This project is supported by state pro-conservation reformists who advocate biotechnology as an environmentally-friendly economic alternative to the current damaging extractive activities. But questions of genetic property rights — and community control of the resources — are unanswered; in the long-term, these could be as contentious as land rights are today.<sup>19</sup>

Local officials have made it clear that while central government sets broad policy guidelines, they will be the ones to apply the policies according to local conditions and to spend much of the environmental funds applied for by the state. This mis-match between local and national policies was illustrated clearly in late 1992: black organizations joined Orewa to protest at the decision of the Chocó regional development corporation to grant a 200,000-hectare logging concession in the lower Atrato river, involving the eviction of thousands of Embera Indians. Permission was granted, despite the companies’ record of devastation in the area and the intervention of a central government minister.

The government also plans to establish a Ministry of the Environment (*Minambiente*). As well as forming part of a National Environment Council made up of other ministries, many with a grim environmental record, it is not clear what powers of enforcement the *Minambiente* will have. It is the autonomous regional development corporations, however, renamed autonomous regional environmental councils, which will be simultaneously responsible for the enforcement of national environmental policies and guidelines, environmental monitoring — and for granting concessions to “use” the rivers and forests.<sup>20</sup>

### A Regional Free Market

The unprecedented pressure for the Plan Pacifico to contribute to national economic growth is in large part due to important changes in Colombian economic policy since 1990, particularly the drive to integrate with the world economy

more.<sup>21</sup> Besides political reform, Gaviria's programme has focused on *apertura económica* (economic opening), aimed at reducing state intervention, privatizing state enterprises, opening up the economy to international competition and trade, and offering greater incentives for the private sector and foreign capital to invest. Exports are considered key to such a free-market economy.

Moves towards free trade throughout Latin America are also increasing the external orientation of the Colombian economy. Colombia's trade with Venezuela has grown considerably as a result of its emerging free-trade agreement with Venezuela and Mexico, currently being negotiated; using membership of this "Group of Three", Colombia hopes to gain access to the North American Free Trade Agreement (NAFTA).

Development of the Pacific would also boost Colombia's links with Chile, seen as a regional free-market success story and a probable future member of an expanded NAFTA.<sup>22</sup> Access to and development of the Pacific's port facilities would enhance plans to double oil production.<sup>23</sup>

## Economy versus Environment

In the Colombian government's vision of "sustainable development", the contradiction between *apertura económica* — to which the Plan Pacífico and associated projects are integral — and protection of the environment and political reforms is unresolved. The text of the Plan Pacífico and national officials insist that black people will be given collective titles to their land; but collective ownership of land for black, as well as indigenous, communities would be at odds with economic development plans based on private ownership and initiatives, and the different cultural values which uphold them.

To overcome this contradiction, local officials have hinted that such rights would, in practice, be kept to a minimum. Holger Peña Córdoba, deputy head of Pladeicop said: "We're not talking about providing titles for all land in the Pacific, but the land next to the rivers where people have traditionally lived and carried out subsistence agriculture."<sup>24</sup>

Head of Valle de Cauca's Pacific Coast development projects, Oscar Isaza Benjumea, added frankly: "There's a problem with Transitory Article 55. Everyone



Women leaders of black communities from the Calima river in Valle de Cauca which have set up a coordinating group of all communities on the river. Pressure for immediate progress in black land rights is crucial.

wants land. Blacks, Indians, colonisers, all of them. What, I ask myself, do they want more reserves for? They don't even use what they've got. What do they produce in their reserves? Their own things."<sup>25</sup>

Leaders of the black and indigenous communities, meanwhile, refute government allegations that they are against development. Carlos Rosero, a young black leader from Valle de Cauca and a member of the special commission on Transitory Article 55, said:

"Blacks are not against economic development. What we want is development that we control, which benefits local people and respects the environment. Blacks are one of the poorest groups in Colombia and have always been neglected and discriminated against by the state. We are campaigning for proper economic and political support to build up our own economy and markets."<sup>26</sup>

But while the black communities demand full participation in decisions affecting their very survival, the Gaviria administration appears to see their involvement as a cosmetic exercise in consultation. For the government, the resolution of black land rights is a prerequisite for a viable private property regime to facilitate economic development in the area. The aim is to concede as little as possible to the blacks, but sufficient to minimize the social unrest and violent conflict which have resulted from land disputes elsewhere in Colombia in the past.

## Key Solutions

Until Colombia's economic, social and political structures are reformed fundamentally, "sustainable development" will be little more than a rhetorical device to confuse observers, particularly international funders.

The key to protecting the environment in the Pacific would be for the state to accept and ensure that the black and indigenous communities define, plan and implement development projects in the region, taking firm action to safeguard their culture and full rights to land. A major step in this direction would be a positive resolution of Transitory Article 55 — although the government has recently rejected the proposals of the black members of the special commission on Transitory Article 55 to enhance local control. If Congress has not passed legislation by 4 July, 1993, the government gains the right under the 1991 Constitution to impose its own legislation. Pressure from the communities for immediate progress in black land rights is thus crucial, particularly before the 1994 presidential election which will bring a new administration.

A lawyer working with both the black and indigenous communities said: "We are walking a tightrope. Unless we build up our strength and explain our case to the outside world, the forces stacked against us mean that one or both of us will fall off. If the state is not forced to play a positive role, there could be an explosion of uncontrolled frustration."

1. Pacific Coast inhabitants represent 2.7 per cent of Colombia's 33 million population.
2. Runaway slaves had established black control over much of the Magdalena, Cauca and Patía rivers, as well as the Pacific Coast.
3. Communities in the Calima river basins have alleged that industrial forestry carried out by Cartón de Colombia, the Cali-based subsidiary of the Ireland-based conglomerate, Jefferson Smurfit, has caused considerable environmental damage in the area. Smurfit accounts for up to 44 per cent of local paper and board production. Colombia is the most profitable of Smurfit's Latin American concerns, which include Venezuela and Mexico, and offers a good launching pad for exports in the region. Cartón de Colombia's chief executive in 1991-92, Gustavo Gómez, was chair of FAO's advisory committee on pulp and paper.
4. Part of the urgency for the Plan Pacifico may have been due to pressure to boost foreign exchange earnings to service foreign debt. Although Colombia steered its way through the 1980s' debt crisis more successfully than other Latin American countries, huge current account deficits in 1981-85 and faltering economic performance built up pressure for economic reform.

### COLOMBIA RETURN APPEAL

*After five years in exile in Europe, Oscar Castaño V. is returning to Colombia later this year to lead a human rights delegation. A trade union organizer, Oscar left his country after appearing on a death list. All others on that list are now dead.*

The delegation will include representatives from the church, politics, the media and academia. It will investigate continuing human rights violations in Latin America's oldest democracy.

The delegation will also consider environmental aspects of the current situation. The rights of the Colombian peoples are being threatened by the unsustainable exploitation of the country's forests.

The Colombia Human Rights Organizations have stated that they "urgently need your solidarity as an essential show of affection between peoples."

You can show solidarity by:

- asking your political representative to support the aims of the delegation
- making a donation to cover the expenses of the delegation and the costs of disseminating the findings of the investigation.

**Please send donations, or requests for further information to the Colombia Return Appeal, c/o Reforest the Earth, 48 Bethel St. Norwich NR2 1NR, UK.**

5. As well as opposition from local communities, three guerrilla fronts, one from the National Liberation Army and two from the Revolutionary Armed Forces of Colombia, operate in the area. Navy boats now patrol the San Juan river.
6. Report of the president to Congress in 1989, quoted in *El Plan de Desarrollo del Pacifico Colombiano: Una Puerta Abierta para el Etnocidio de los Indígenas y Negros*, Orewa, Quibdó, September 1990.
7. Another road would link Medellín and the Pacific Coast, complementing the existing road between Medellín and Quibdó, the capital of the Chocó department, while yet another would extend beyond Medellín to the Venezuelan border.
8. Black groups included the Peasants' Association of the Atrato river, formed in 1987, the Peasants' Association of the San Juan river, formed in 1990, the Peasants' Association of the Patía river, the Organization of Popular Neighbourhoods of the Chocó, the coordinating Cimarrón Movement, formed in 1982, and the Coordinating Committee of Black Communities of Colombia. Orewa links 204 communities on the Pacific Coast. The indigenous peoples realised that it would be worthless to defend their pockets of land if the majority blacks did not also defend theirs against colonizers. Orewa is a member of the National Organisation of Colombian Indians, created in 1982, and is supported by the Catholic Bishop in Quibdó, the capital of the Chocó department. The Regional Indigenous Organisation of Antioquia works alongside the Chocó branch of Orewa.
9. "The Constitutional Assembly: Change and Challenge", *Colombia Bulletin* (of Justice and Peace), Vol. 1, No. 3, Bogotá, October 1991, p.6.
10. The new plan proposed institutional changes to ensure greater control and coherence of decision-making. Control of the Plan Pacifico itself would go to a new *Corpes del Occidente* (Regional Planning Council of the Pacific Coast). The Corpes, formed by the four departments of the Pacific region — Chocó, Valle de Cauca, Cauca and Nariño — would have a central technical unit based in Buenaventura and sub-units in the rest of the Pacific. They would gradually assume the functions previously carried out by the CVC and the other regional autonomous development corporations.
11. Buenaventura is unable to handle expected cargo increases even with extension of its facilities by the year 2000, while the installations at Tumaco are too small to accommodate large vessels and to deal with the overload. See "Feasibility studies for the expansion of port capacity", TAMS Consultants, July 1991, quoted in *Plan Pacifico. Una Nueva Estrategia de Desarrollo Sostenible para la Costa Pacifica Colombiana*, Presidencia de la República/ Departamento de Planeación Nacional, Bogotá, March 1992, p.16.
12. Comment made to Ian Linden, general secretary of the Catholic Institute for International Relations, in May 1993.
13. Another proposal in the new Plan Pacifico is a road from Tumaco, the Pacific's second major port near the border with Ecuador (where an industrial fishing complex is being built) to Pasto, a town inland in the mountains, which should be completed in 1993 and would link up with Cali and Bogotá further north. The feasibility of a new main road between Buga, Loboquerrero, Buenaventura and Cali was to be studied, so as to ease pressure on the existing road (which would be repaired and upgraded) which has damaged the Dagua river basin.
14. This question was raised at a forum in Medellín in late 1992, "Colombia in the Era of the Pacific", sponsored by the daily newspaper *El Espectador*. At a previous forum, held by the Foreign Ministry and the Valle de Cauca authorities in August 1992, several speakers, including the Pacific naval commander, revived the PTI canal which would take ten years to complete, costing between US\$1 billion and US\$13 billion, depending on the options chosen. Both these fora were attended by 12 ambassadors from Pacific countries.
15. In March 1992, President Gaviria discussed with the president of Panama, Guillermo Endara, whether the United States could be asked to fulfil an old promise to finance two-thirds of the costs of bridging the Darién Gap. The project was blocked in 1975 after US court action by Friends of the Earth, but the US Department of Agriculture has now lifted its objections to the project.
15. *Revista de las Corporaciones Regionales* (Publicación de las Corporaciones Autónomas Regionales de Desarrollo), No. 2, Departamento de Planeación Nacional, Bogotá, p.6.
16. According to the tables published in the Plan Pacifico.
17. Supported by the Dutch government, the UN Food and Agriculture Organisation (FAO), the IDB, the World Bank and the United Nations Development Programme (UNDP).
18. Some US\$5 million IDB environmental funds will assist the identification and assessment of the "political-administrative problems of ownership" of the black communities. Another US\$9.9 million is allocated to the recovery and "sustainable" management of mangroves and forests in the lower San Juan and Calima river basins. And a further US\$5 is to be spent on initiatives to develop more environmentally-friendly mining methods.
19. Of two draft applications for GEF funds seen by the author, one was firmly based on exclusion of the communities from participation in the research; the other advocated their involvement as the people with knowledge of their own environment. This project, however, is only a small part of the Plan Pacifico.
20. The role of *Minambiente* would appear to be confined to one of coordination and general policy-making. Complaints would be channelled through an environmental section of the ombudsman's office. According to one official of *Inderena*, the body to be replaced, *Minambiente* will have much fewer staff than *Inderena*, and will be in an even weaker position to force regional corporations to take environmental protection measures.
21. This drive was attributed to difficulties of the now unfashionable import substitution model, based on the protection of domestic markets.
22. Foreign Minister Sanín was a key speaker at *El Espectador's* Plan Pacifico forums; a former ambassador to Venezuela, she played an influential role in the free trade agreement negotiations with Venezuela and Mexico.
23. As a result of a newly discovered oil field in Casanare, 100 miles east of Bogotá, in which British Petroleum has a stake.
24. Interview with the author.
25. Interview with the author.
26. Interview with the author.

**A longer study on the Colombian Pacific region and the Plan Pacifico by Jon Barnes will be published later this year.**



A Nambiquara Indian standing beside the BR-364 which runs through several of her tribe's villages.

## Brazil's BR-364 Highway

### A Road to Nowhere?

by  
Alexander Shankland

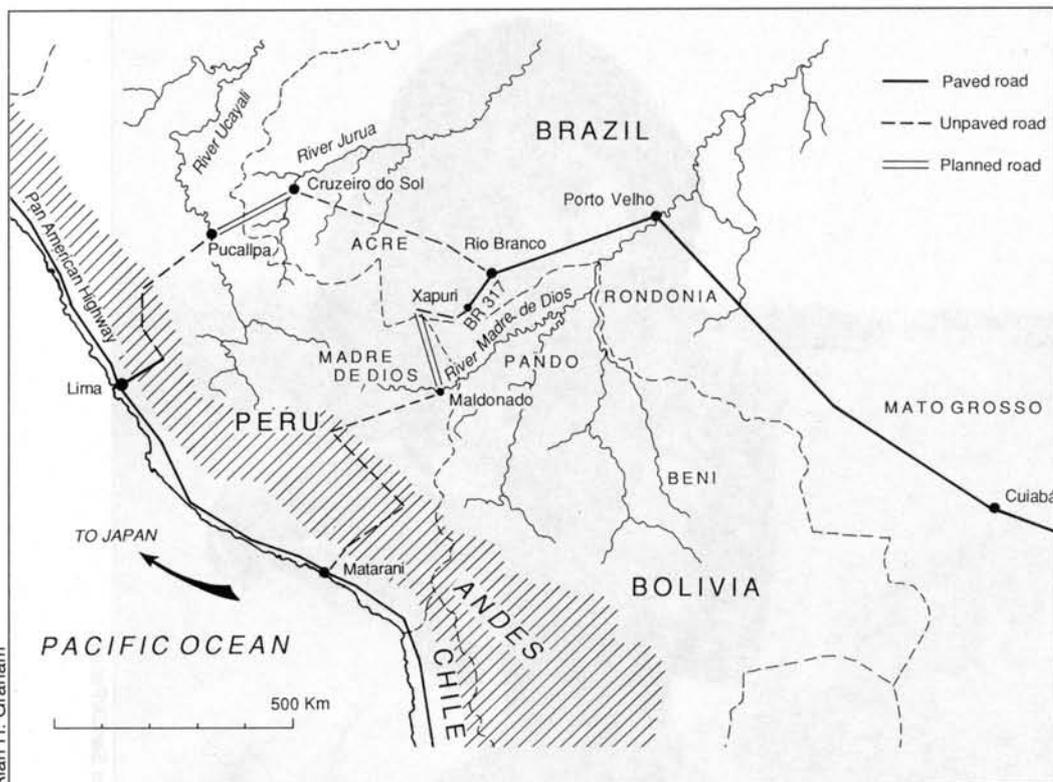
*BR-364, the trans-Amazonian highway to the Brazilian frontier state of Acre, has taken decades to plan and build. The genocide and deforestation it catalyzed in Rondônia in the 1980s caused an international outcry, and local people in Acre successfully fought to have the project suspended. Now they have become more enthusiastic about being linked by tarmac to the rest of Brazil, and are optimistic that they can prevent a repetition of the Rondônia catastrophe. But have they considered the road's ultimate destiny — to breach the Andes and link the forests and farmlands of Brazil to the lucrative Japanese market?*

When a rubber-tappers union leader called Francisco Alves Mendes Filho was gunned down outside his home in the remote western Amazon state of Acre on 22 December, 1988, he became Brazil's first Green martyr, a worldwide symbol of the struggle for social justice and ecological sanity. Chico Mendes died opposing a road: Federal Highway BR-364, running east/west across the states of Rondônia and Acre. His success in persuading the Inter-American Development Bank (IDB) to suspend funds for its paving as far as Acre's capital, Rio Branco, earned Mendes the hatred of the cattle barons and land speculators who looked to BR-364 to link them with the rest of Brazil.

**Alexander Shankland**, a Brazilian-based journalist and development worker, is co-ordinating a health project in Western Acre for the British NGO, Health Unlimited.

His murder at the hands of these ranchers consolidated worldwide opposition to the paving of the road.

Yet in March 1992, the newly-paved stretch of the BR-364 between Rio Branco and Porto Velho, capital of Rondônia, was opened. Completed with renewed IDB funding, it attracted scarcely a murmur from the Brazilian or international press. A year later, the Brazilian Congress approved funding for the road's extension to Peru and the Pacific along the length of the largest of the "extractive reserves" won by the Acre rubber-tappers in their struggle for land rights, posthumously named in honour of Chico Mendes. The response of Gumerindo Rodrigues, Mendes' friend and adviser and the administrator of the cooperative he had founded, was "paving the road will make our work a lot easier."



What had changed between 1988 and 1993? To understand, it is necessary to trace the story back to the beginning of this century when the road first became a symbol of the occupation of Western Amazonia and the “conquest” of its forests.

### History of a Road Scheme

Two military figures stand out in the prehistory of the BR-364. Both were sensitive men, acutely aware of the value of the forest, and the vulnerability of local indigenous cultures. Yet both were pioneers for the infrastructure that was eventually to culminate in devastation.

Marshal Cândido Rondon was the builder of the first telegraph line north-west into the Amazon from the town of Cuiabá in the Mato Grosso. Although Rondon was aware of the dangers of unchecked exploitation of the forest, and his men were forbidden to fire at Indians even when under attack, the Indians died in their thousands of measles and other diseases that spread through the semi-permanent settlements that sprang up around the telegraph line. Rondon gave his name to the state of Rondônia, and to the road that was to open it up, the Rodovia Marechal Rondon, now called simply the BR-364.

At the same time, a young military engineer and journalist, Euclides da Cunha, was publishing vivid descriptions of conditions in Acre at the height of the rubber boom. The majority of the region’s indigenous communities were either being annihilated or enslaved on rubber estates carved out of their territories. Their executioners were the *seringueiros* or rubber-tappers, immigrants from the poor north-east of Brazil, whose lot was little better than that of their victims’. “Amid the exuberant landscape of the rubber forests lies one of the most criminal systems of labour organization yet invented,” wrote Da Cunha. “The *seringueiro* is the victim of a tremendous irony: he works to enslave himself.”<sup>1</sup> Da Cunha deserves respect as one of the first people to advocate land rights for the rubber-tappers; however, his proposals to open up the country by constructing

a railway along the route later taken by the BR-364 were rather less far-sighted.

The debt-bondage system, through which the rubber barons charged workers more for their passage and equipment than they could repay during a year’s tapping, still dominates in large areas of the Western Amazon. It was reinforced in the 1940s by the US-funded campaign to supply Amazon rubber to the Allies after the Japanese capture of the British plantations in Malaya, which exhorted the landless poor of the northeast to join the “battle for rubber”. Of the 100,000 Northeasterners who responded to this call to arms, an estimated 40,000 died of disease and starvation.<sup>2</sup> For Rondônia’s Indians, however, the “battle for rubber” was a battle for their lands and for their very survival.

By the mid-1980s, the military had changed its policy; ranching had replaced rubber-tapping as the key to the conquest of Western Amazonia, and their former “soldiers”, the *seringueiros*, were no longer useful. The Indians and the rubber-tappers, now lumped together as “obstacles to development”, found themselves facing a common threat. Despite their former enmity, they combined to form the “Forest Peoples’ Alliance”, the first cohesive local opposition to the planners’ schemes. The alliance called for “extractive reserves” controlled by the rubber-tappers, the first of which was created in Acre’s Upper Juruá Valley in 1990; and above all it opposed the centrepiece of the plans for the region — the BR-364.

### A Military Campaign

When the construction of the BR-364 finally began in 1966, it was a military affair. The road was driven through Rondônia, into the flank of the Amazon rainforest, not for economic reasons but out of an explicit desire for conquest, part of the recently-installed military dictatorship’s determination to push the country towards its destiny of “Brasil Grande”. The project was sponsored by the US-Brazilian Military Accord, pushed through after the CIA-sponsored military coup of March 1964. It was built by the Brazilian Army following the route which the military strategists had decreed back in 1960. They had overruled an alternative route to Peru and the Pacific through Mato Grosso and Bolivia on the grounds that the course followed by BR-364 was strategically important to the “integration” of Amazonia.

The need to strengthen Brazil’s hold on the Amazon so that it did not drift away from central control — or even become a separate country dominated by foreign interests — has been a persistent theme from the writings of Euclides da Cunha to the arguments of the Higher Military Academy in favour of the megalomaniac *Calha Norte* scheme, which plans to ring Brazil’s Amazonian borders with roads and colonization projects. The forest is seen as an enemy to be conquered and subjugated by the

legions of progress (usually the Army itself). One Brazilian reporter described "a different kind of guerilla warfare" in which army engineers were "confronting 1,521 kilometres of jungle, wild beasts, Indians and mosquitoes... with no weapons but their courage and will to win".<sup>3</sup> The forest and its inhabitants, human and non-human, were lumped together as "the enemy".

As the road crossed Rondônia and reached into Acre, thousands of settlers responded to the military government's offer of "land without men for men without land", just as a previous generation had joined the doomed battalions of the "battle for rubber". The "march to the west" began to slow down, however, as migrants discovered that the "land without men" was already inhabited by rubber-tappers and Indians, that over 80 per cent of Rondônian soils could not sustain agriculture once the forest had been destroyed and that the BR-364 was a precarious lifeline.

As the road was not paved, the army had to fight a rearguard action against its erosion by the relentless rain. The 1,000-mile journey between Cuiabá and the boomtown of Porto Velho took two weeks or more in the September-to-March wet season. The Brazilian government turned to the World Bank to fund the paving and to the giant construction companies, now one of the most powerful lobbies in Brazil, to carry it out.

The paving of the BR-364 was to be the focus of a much more ambitious plan, which would subject the untidy contours of Rondônia's rainforest to a grid of side-roads and the neat plots of settlers. The World Bank liked what it saw on the planners' maps, and agreed to provide \$434.4 million of the scheme's total budget of \$1.5 billion. The Northwest Brazil Integrated Development Programme, more commonly known as *Polonoroeste*, proved to be a social and environmental catastrophe. By the time the BR-364 was paved as far as Porto Velho in 1984, some 160,000 new migrants were reaching Rondônia every year. Four years later, a fifth of Rondônia's rainforest had been destroyed; at least 85 per cent of its indigenous population was estimated to have died from violence and newly-introduced diseases.<sup>4</sup>

The uproar from environmentalists, missionaries and anthropologists, as well as the violent resistance put up by Indian groups such as the Uru-Eu-Wau-Wau, forced the World Bank to reconsider; in 1985 it suspended the loan, the first time it had ever taken such action because of a project's environmental and human-rights consequences. But this did not halt the forest-burning or the suffering of Rondônia's indigenous peoples. In 1990, the Suruí people were still dying from measles, malaria and tuberculosis, loggers were stripping their reserve of the last of its mahogany, and the Federal Indian agency, FUNAI, had closed its local post to sick Indians on the grounds that it had no money for food or medicines.<sup>5</sup>

While the World Bank tried vainly to extract credible guarantees of environmental and social responsibility from the politicians in Porto Velho and Brasília in the discussions that surrounded Polonoroeste's successor project, *Planaflo*, an-

other multilateral institution stepped in to guarantee the paving of BR-364. The Inter-American Development Bank (IDB) agreed in 1987 to provide funding for the stretch linking Porto Velho to Rio Branco, capital of the neighbouring state of Acre.

## Resistance in Acre

Even before paving, BR-364 had been a conduit for outsiders to move in to Eastern Acre. The new arrivals, however were not

landless migrants but powerful ranching and business interests from Southern Brazil, attracted by government incentives to launch logging or cattle-raising projects, or simply to speculate in land. The forests of Acre were not carved up by secondary settlers' roads as Rondônia's had been.

Nevertheless, indigenous groups on BR-364's path suffered as badly as the Indians of Rondônia had done. The Kaxarari of the Rondônia/Acre border were devastated by epidemics after the construction company, Mendes Júnior, dug a huge gravel pit on their territory, providing a perfect breeding-ground for malarial mosquitoes. In November 1992, chief Alberto César Kaxarari claimed that only 177 of his 3,000-strong people had survived the epidemics, and 70 per cent of the survivors were suffering from malaria and tuberculosis.<sup>6</sup> The Katukina, a group living on the BR-364 some fifty miles from Cruzeiro do Sul, have seen

their village turned into a roadside stop and suffer problems of alcoholism, malaria and abuse of women.<sup>7</sup> A few groups remain relatively unaffected, mainly confined to Western Acre's Juruá Valley. Although BR-364 stretches as far as Cruzeiro do Sul on the River Juruá, the road remains unpaved and the distance discourages migration and deforestation.

The roadbuilders met a different kind of resistance from the Indian warriors and international campaigners they had encountered in Rondônia. The forest people in Acre had already developed a vigorous and determined grassroots movement. Helped by organizations such as the Catholic Church's Indigenous Missionary Council and the Acre Pro-Indian Commission, many of Acre's indigenous groups had fought crucial battles for land rights and independence from the rubber barons before the paving of the BR-364. Their demands for territorial guarantees and the right to set up co-operatives were subsequently to inspire Chico Mendes' struggle for extractive reserves and sustainable economic alternatives.

But it was the rubber-tappers who took the initial lead in resisting the destruction brought by the BR-364. One of the first protesters against the deforestation driving *seringueiros* from their homes was Wilson Pinheiro, Chico Mendes's mentor in the Rural Workers' Union. After his murder by the hired guns of the invading ranchers in 1980, the *seringueiros* gave the authorities a deadline to take action against his assassins; when none was forthcoming, they kidnapped the rancher who had ordered Pinheiro's death and put him before a firing squad. The government crackdown that followed drove most of the Rural Work-



The road Chico Mendes died opposing is now being built.

ers' Union leadership underground; Chico Mendes was one of those caught and tortured.

From then on, the rubber-tappers pursued a policy of non-violence which involved unarmed *empates* — human blockades — with ranchers' deforestation gangs. In the lawless state of Acre, the gunmen could not always be shamed into forswearing force when confronted by barriers of women and children; more *empates* were lost than were won. By Chico Mendes' own reckoning, however, those that were won saved three million hectares of forest.<sup>8</sup>

The moral victory was greater, because these peaceful tactics could be safely disassociated from the ideologically-charged context of an "armed liberation struggle". In the mid-1980s, a number of outsiders, including film-maker Adrian Cowell and anthropologists Stephan Schwartzman and Mary Alegretti, recognized the symbolic potential of the *empates*, and used it to influence the World Bank and IDB. Mendes was invited to meet members of the key Senate Appropriations Committee, responsible for approving US funds for the multilateral banks in 1987.<sup>9</sup> This trip bore fruit: in January 1988, the IDB suspended loan disbursements for the paving of the Porto Velho-Rio Branco stretch of the BR-364.

For the first time, it was a local leader rather than an academic or a professional campaigner who emerged as the main spokesperson for the opposition to a destructive development project in Amazonia. The cattle barons and loggers had been unsure how to respond to academics and international campaigners; but they knew how to deal with an awkward union leader. Less than a year after the IDB's decision to suspend the BR-364 loan, Chico Mendes had become yet another name on the list of more than 1,000 Amazonians murdered for resisting eviction from the forest, a list which is still growing.

His murder provided a focal point for mounting international concern at the consequences of deforestation, and his name gave an aura of near-sanctity to the causes in which it was invoked. The question was: which cause should it be made to serve? Mendes' dream of socialist revolution was decidedly out of fashion, and the extractive reserves he had advocated remained the subject of confusing debate as to their nature, role and merits. By far the easiest banner that could be taken up in his name was the campaign to stop the road. The road's construction was successfully delayed for a couple of years but was eventually resumed when Chico Mendes' name had lost much of its resonance, tarnished by squabbles between his widow and his political heirs.

When the IDB resumed funding for the paving the BR-364 between Porto Velho and Rio Branco in 1989, voices were raised in protest, mainly because of its devastating effect on the Kaxarari Indians; but these were muffled by the \$4 million which the IDB put into indigenous welfare and environmental protection. When the paving reached Rio Branco in March 1992, the international silence that greeted it was deafening.

## A Forest Civilization

What had changed? Had BR-364 worn down its critics with the apparent inevitability of its westward march? A more surprising answer is given by Gilberto Siqueira, Secretary for Planning in the Rio Branco municipal government: "the asphalt has reached us, but it hasn't brought the results people were expecting." Brazil's brutal recession is one reason; there is very little spare capital available for risky ventures in remote Amazon regions, especially now the government has cut back the subsidies that fuelled destruction. But it is not only the rich who are not following the BR-364; the poor are not coming to Acre either.

According to Siqueira, the shanty towns on the outskirts of Rio Branco are not swelled by landless migrants flocking in from other states, but by former rubber-tappers from Acre's forests, driven out by the almost total breakdown of the rubber economy. The recession and the multinational tyre companies' boycott of Amazon rubber, (a response to the Brazilian government's tariffs on imports of Asian rubber) have pushed prices down to their lowest-ever recorded levels. On the River Juruá in February 1993, most *seringueiros* could not find a buyer for their rubber. Many of the forest community cooperatives have collapsed and the processing plants to which they sold their rubber have shut down.<sup>10</sup>

Siqueira is in favour of paving BR-364 right across Acre as a means of revitalizing the state. But Siqueira is no ordinary technocrat, dreaming of highways to prosperity slicing through the tangled inconvenience of the forest. "A road is just a road; it all depends what you do with it," he argues. As head of FUNTAC, the Acre state government's innovative Technology Foundation, he was responsible for an ecological zoning project, the professed aim of which was to lay the groundwork for Acre's future as a "forest civilisation". FUNTAC proposed "an economic model where the environment is not seen as an obstacle to development but as a set of resources whose rational exploitation could guarantee the preservation both of the environment itself and of the quality of life of the region's inhabitants".<sup>11</sup>

Until recently, Siqueira was one of the most influential voices guiding the corrupt but progressively-minded state government of Flaviano Melo, and it seemed possible that this project might be implemented — all that was needed was \$238 million. In theory, the Governor would get the paved highway which he had promised the voters of Acre, the forest-dwellers along the route would get guaranteed land rights and protection, and, at carefully-defined points within the scrupulous ecological zoning plan, the state would provide appropriate technology for sustainable logging, processing of forest produce and the other elements that would make up the economy of a "forest civilization".

The dream melted away, however, when the 1990 state election brought to power the government's opponents, an alliance of the old rubber-baron aristocracy with the ranching interests. Road-building as forcible subjection of the jungle

### XIth International Assembly of the Fourth World

Ethnic, Tribal and Autonomous Peoples,  
Nations and Communities

6-9 September 1993

Barcelona, Catalunya, SPAIN

- |   |  |
|---|--|
| •Sir Richard Body MP<br>Radical MP and author | •Edward Goldsmith<br>Founding Editor of <i>The Ecologist</i>         |
| •John Seymour<br>Writer on self-sufficiency   | •Professor Leopold Kohr<br>Author of <i>The Breakdown of Nations</i> |

For more information, contact Josep i Puig, Assembly Co-ordinator,  
Eduard Toda 98, 1R, 2A, 08031 Barcelona, Catalunya, SPAIN.

The Fourth World was founded 27 years; it consists of individuals, communities, ethnic groups, tribes and small nations who seek a profound restructuring of the size and scale of our political and economic institutions to dimensions acceptable to genuine democratic controls.

once again became the dominant rhetoric. However, the multilateral agencies with the money to get the bulldozers moving were in no mood for further criticism from environmentalists, and kept their distance from Acre. The BR-364 had lost its chance; but there had been a moment of equilibrium between the drive to pave it and the drive to save the forest, when it was possible to glimpse the shape of a different road, one that might not lead to destruction.

## The Alternative Road

The proponents of this "other road" are not all out of office. One of them is Jorge Viana, the charismatic young mayor of Rio Branco since November 1992. Viana worked for Gilberto Siqueira and was a good friend of Chico Mendes. Although he is a member of the *Partido dos Trabalhadores*, or Workers' Party, which Mendes helped to found, Viana's rhetoric on the BR-364 is closer to that of Gilberto Siqueira. He calls for BR-364 to be paved "not for the benefit of ranchers or construction companies, but for the forest communities who need it to take them out of their economic isolation". What matters, he claims, is "not the undertaking itself, but the policy within which it lies".

Viana is supported by another close friend of Mendes, Gumercindo Rodrigues of the Xapuri Agricultural and Extractive Cooperative (CAEX), which runs the Brazil nut processing plant which grew out of the co-operative founded by Mendes. Rodrigues argues that by lowering transport costs, roads give the alternative economic initiatives of forest-dwellers a better chance of success in bringing "ethics to the market". Rodrigues also points out that tarmac improves communications for the forest-dwellers, allowing greater mobility for union organizers and those preparing *empates* against deforestation.

Antônio Macedo of the National Council of Rubber-tappers' regional office for the Juruá Valley is also optimistic about the paving of the BR-364 as far as Cruzeiro do Sul, "provided the forest's peoples are involved in planning from the very beginning". Even Chief Fernando of the Katukina favours paving; since his people already have the white man's diseases that come with the road that cuts their territory, he argues, they should at least have reliable access to the white man's hospital where they can be treated and to a market where they can exchange produce for the white man's medicines.

There are, of course, differences within the movement. Rodrigues claims that the groups in the Juruá Valley are not sufficiently organized to resist the full impact of a paved BR-364 and argues that paving the alternative route to Peru via his own territory of Xapuri would be a safer alternative, while Macedo points to forest-dweller *empates* against logging in the Juruá as a sign of determination to resist, and claims that his Upper Juruá Extractive Reserve has made greater strides than Rodrigues' cooperative towards showing the way to sustainable community development alternatives. Indigenous communities who, unlike the Katukina, have so far escaped the road's direct



Peter Musson

*A rancher's hired hand. In Brazil, the frontier conflict between cowboys and Indians still continues.*

impact have no desire to see it get any closer, but those which have established cooperatives are eyeing the possibility of improved access to markets for their produce.

Despite the differences, however, the underlying consensus is clear: the forest-dwellers of Acre still have reservations, but they are no longer afraid of the BR-364. Because of the security afforded by international exposure, a greater willingness to listen on the part of the Brazilian government and their own increased self-confidence in facing the ranchers and loggers, Mendes' companions now see opportunity along the road he died opposing.

Their confidence may derive from a temporary position of relative political strength rather than from a considered analysis of all the risks the road implies; but it points to a fundamental change that has occurred since the death of Chico Mendes: the consensus between Northern environmentalists and Amazonian forest-dwellers is gone. From well-

intentioned technocrats to indigenous leaders, virtually no one with influence and Green credentials in Acre is unequivocally opposed to the paving of the road. From now on, those taking up the "stop the road" banner in the North will have to ask themselves whether they can honestly claim it is also the banner of the peoples of the forest.

## Beyond the Last Frontier

A further development, however, may divert attention from this dilemma. Acre is not the end of the line. The BR-364 has long been held to be synonymous with a proposed "Acre-Pacific Highway", and ever since its inception, the eventual link with Peru has been one of the road's prime justifications.

In 1907, Euclides da Cunha had foreseen that the "Trans-Acre" route he advocated would not be merely local, and that its true vocation was "to transform itself into an international route of extraordinary potential".<sup>12</sup> He also recognized that the Peruvian province of Madre de Dios, bordering Eastern Acre, was an extraordinary sanctuary of cultural as well as biological diversity, and lamented that its indigenous peoples, "the most interesting of South American natives", were being "barbarously besieged" by the rifles of the Peruvian, Brazilian and Bolivian rubber barons.<sup>13</sup> Da Cunha instead recommended a route passing from Cruzeiro do Sul in the West of Acre to the Ucayali Valley.

Da Cunha's advice has been ignored. In 1981, Brazil and Peru signed an agreement aimed at giving Brazil its long-sought route to the Pacific via Peru with the proviso that preference be given to a route passing through Eastern Acre and Madre de Dios. Though the Acre state government has pushed for a route via Cruzeiro do Sul, the lobby for the eastern route has continued to grow, to the point where its confirmation now seems inevitable.

With the shift towards Madre de Dios, the Pacific route has changed its number to BR-317. In April 1993, with funds for the

BR-364 still on hold, the Brazilian Congress voted to include the paving of BR-317 from Rio Branco to the Peruvian border in the Federal Budget. Because the road is already paved for almost half its extension (and in any case is only a third as long as the still unpaved BR-364 between Rio Branco and Cruzeiro do Sul), Brazil can afford to pay for the paving itself, and avoid the awkward placating of environmentalists that would be necessary were multilateral money to be used.

Many environmentalists have, in any case, shown little sign of needing placating. In fact, there has been a collective sigh of relief at the option for a route through eastern Acre, where, as Gumercindo Rodrigues puts it, "what was going to be deforested already has been" and well-organized forest-dwellers' groups are confident they can protect the rest. The potentially devastating impact on the Peruvian Madre de Dios has been forgotten by groups used to seeing the borders of Acre as the limits of the struggle to protect the forests of Western Amazonia.

---

*Since the Katukina now have the white man's diseases that come with the road, Chief Fernando argues that they should at least have reliable access to the white man's hospital and to a market where they can obtain the white man's medicines.*

---

A Polonoeste-style development scheme in Madre de Dios could have severe repercussions for Acre, ranging from floods caused by deforestation of the Peruvian headwaters of rivers flowing through the state, to the migration of desperate Peruvian forest-dwellers expelled by colonists and loggers. Such transnational migration has a precedent in the area: an estimated 20,000 Brazilian forest-dwellers live in conditions of near-slavery on rubber estates in the neighbouring Bolivian provinces of Beni and Pando, having fled Eastern Acre in the face of the onslaught that followed the opening of highways BR-364 and BR-317.<sup>14</sup>

The awakening of forest peoples' groups to the threat represented by the BR-317 to Madre de Dios has been slow. Osmarino Amâncio Rodrigues, president of the Brasília Rural Workers' Union, admits to knowing "virtually nothing" of the situation across the Peruvian border. Indigenous peoples' organizations are moving faster, because the barrier of the frontier is virtually meaningless to them. The Ashaninka, Kaxinawá and Jaminawa peoples, among the most numerous of Acre's indigenous groups, all have relatives across the border. Traditional inter-group visiting is acquiring a political dimension; Biraci Brasil Yawanawá, Administrator of the Brazilian Juruá Valley Indigenous Peoples' Movement, is organizing a meeting of the Nawa (Pano-speaking) peoples of Western Amazonia to which delegates from Peru will be invited.

In Peru itself, however, no campaign to raise awareness of the perils of the road has yet been launched, and forest-dwellers' representatives seem unsure about how to proceed. Ailton Krenak, the outspoken former coordinator of Brazil's Union of Indigenous Peoples (UNI) and head of the Indigenous Research Centre, accuses his Peruvian counterparts of "behaving like fools, pretending it wasn't going to happen". Francisco Xavier Aguaruna of the main indigenous peoples' organization for the Peruvian Amazon, AIDSESEP, says that a road-building project in Madre de Dios would be seen "with reservations" and could bring "many problems", but his group has no clear information about government plans and no strategy to deal with them.

## A Foreign Takeover

While forest peoples' groups hesitate, the road warriors are forging ahead. Peruvian President Alberto Fujimori recently promised that within a year the main natural obstacle standing between the existing paved road network and the Brazilian border, the River Madre de Dios, would be spanned by a 600-metre bridge.<sup>15</sup> Fujimori's dictatorial government leans heavily on the Peruvian military, who are as keen as their Brazilian counterparts to see the road go through and use the same rhetoric of the need to "integrate" the Amazonian provinces to preserve them from a "foreign takeover". Both countries have accused environmentalists of being in league with forces ranging from the CIA to multinational mining companies, in a bid to "internationalize" the Amazon.

The military's interest is more than control of foreign interference. Brazil is the major channel for Peruvian and Bolivian cocaine on its way to Europe; a direct route to the Atlantic presents an unparalleled opportunity for the drug cartels to step up this trade while giving the army better access to the traffickers' strongholds. American "advisers" are frequent visitors to the region: a Rio Branco TV station recently claimed to have discovered a joint Peruvian-American air base under construction in Esperanza, just across the border from Acre.<sup>16</sup>

Linked to the problem of drugs is that of terrorism; the authorities in Acre are concerned that the *Sendero Luminoso* guerillas who now control large areas of the Peruvian Amazon would be able to use the road both as an escape route when under pressure and as a route for infiltrating Brazil. Confrontation along the road between government forces, guerillas and traffickers would inevitably catch forest-dwellers in its crossfire. Indigenous groups and smallholder communities have been persecuted for alleged support of *Sendero*, while the Ashaninka Indians (of whom there are 700 in Acre and perhaps 30,000 in Peru), have already suffered heavy losses in a series of running battles against the guerillas. The military herbicide, Agent Orange, which has been used in the deforestation of ranches in Acre,<sup>17</sup> may well come to be used against coca plantations and guerilla hideouts, while the clearing of areas for coca is itself an increasingly serious cause of deforestation.

In Brazil, the military is not the only force pushing for the road. Agribusiness interests in Central and Southern Brazil claim that a land route to the Pacific could save up to \$100 per ton on freight for the soya grown on the *Cerrado* scrublands of the Brazilian mid-west.<sup>18</sup> This would help them squeeze US soya out of the lucrative Japanese market, lending weight to the accusation that President Bush was more preoccupied with trade than ecology when he asked the Japanese government not to consider funding the road in February 1988.<sup>19</sup>

With the multilateral banks wary of backing either BR-364 or the alternative BR-317 route, Japan is considered by all parties to be the most likely source of funding. Peruvian government sources have confirmed plans to approach both the Japanese and the IDB.<sup>20</sup> Japan already funds a large logging and rice-growing project in the Bolivian province of Beni, which could easily link up to the BR-317. But the main fear is that the Japanese are interested in the vast timber reserves of Western Amazonia. If so, even if Western Acre escapes the paving of BR-364, it may still find itself facing an influx of loggers.

Madre de Dios has other resources ripe for exploitation — huge deposits of natural gas, in which the Brazilian construction giant, Norberto Odebrecht, is reputedly interested. Odebrecht's

name crops up with a sinister frequency when BR-364, BR-317 and the Pacific route are discussed. The firm has offices in Rio Branco (where a local newspaper has accused it of involvement in the murder of Acre's former Governor, Edmundo Pinto, after he threatened to expose corruption in construction deals in the state<sup>21</sup>) and Lima, where it lobbies ceaselessly for the Brazil-Peru road link. Odebrecht's most prominent lobbyist was Brazil's former finance minister, Eliseu Resende, who was forced to resign in May 1993 after his advocacy of a government loan to the construction company for an irrigation project in Peru was leaked to the press.

Juan Carlos Díaz, former head of the provincial development agency in Madre de Dios, guarantees that the road will only go through as part of a \$1.065 billion "integrated development programme" which has already "evaluated [the road's] environmental impact to establish ecological conservation" and that the indigenous population of the affected area is "insignificant".<sup>22</sup> With players as powerful as Odebrecht and the Peruvian military, however, it seems unlikely that paper guarantees will be of much value to groups such as the far from "insignificant" concentrations of indigenous people living north of the road's projected course in the Manu Biosphere Reserve.

The mentality of those committed to driving the road through Madre de Dios appears identical to that which provoked the disaster of Rondônia. Through the struggle of people like Chico Mendes, forest dwellers have won the right to a hearing on the highway in Acre. Their counterparts across the border in Peru have little chance of being heard in a country ravaged by terrorism and economic chaos and dominated by an authoritarian régime.

In Acre, the rubber-tappers say that their path through the forest is marked out by the rubber trees themselves; each tree's largest branch points to the next one, and although the paths may seem tortuous, they always return to their starting-point after about 100 trees. The *seringueiros* call their tapping-path the *estrada*, Portuguese for highway. Their *estrada* obeys the modest logic of the forest; BR-364 and its Pacific-bound successor are highways driven by a darker, more remorseless logic.

## References

1. Da Cunha, E., "A Margem da História" in *Obra Completa Volume 1*, Companhia José Aguilar Editôra, Rio de Janeiro, 1986, p. 232
2. Arnt, R.A., "O Espaço Ideal", in Arnt, R. and Schwartzman, S., *Um Artificio Orgânico; Transição na Amazônia e Ambientalismo*, Rocco, Rio de Janeiro, 1992, p.60.
3. Report in *JT*, 4 July, 1967
4. Estimate by Brazilian Catholic Church's Indigenous Missionary Council (CIMI), quoted in *National Geographic*, Vol. 174, No. 6, p.792.
5. Author's personal research for article published in the *Daily Telegraph*, 13 November, 1990.
6. *A Gazeta*, 7 November, 1992
7. Author's visit to Katukina village, July 1989 and Health Unlimited/UNI-Acre health team report, February 1993.
8. Shoumatoff, A., *The World is Burning*, Little Brown, Boston, 1990, p.90.
9. *Ibid.*
10. Author's research, Upper Juruá field trip, February 1993.
11. Fundação de Tecnologia do Estado do Acre, *Monitoramento da Cobertura Florestal do Estado do Acre*. Rio Branco, 1990, p.33.
12. Da Cunha, *op. cit.*, p. 286.
13. *Ibid.*
14. Personal communication from Osmarino Amâncio Rodrigues, 18 February, 1993.
15. Personal communication from Juan Carlos Díaz, 13 May, 1993.
16. Report on TV *Gazeta*, 21 March, 1993.
17. Eyewitness report to Health Unlimited/UNI-Acre health team, May 1992.
18. Arnt, R.A., in *Folha de São Paulo*, 28 October, 1990.
19. *Ibid.*
20. Source anonymous by request.
21. *A Gazeta*, Rio Branco, May-June 1992, *passim*.
22. Personal communication from Juan Carlos Díaz, 13 May, 1993.

# Human Rights begin with Breakfast

At a time when the world community is considering how to promote universal human rights, War on Want is launching a new campaign called 'A Human Right to Development'.

War on Want believes that it is time that equal attention is given to social, cultural and economic rights alongside civil and political rights.

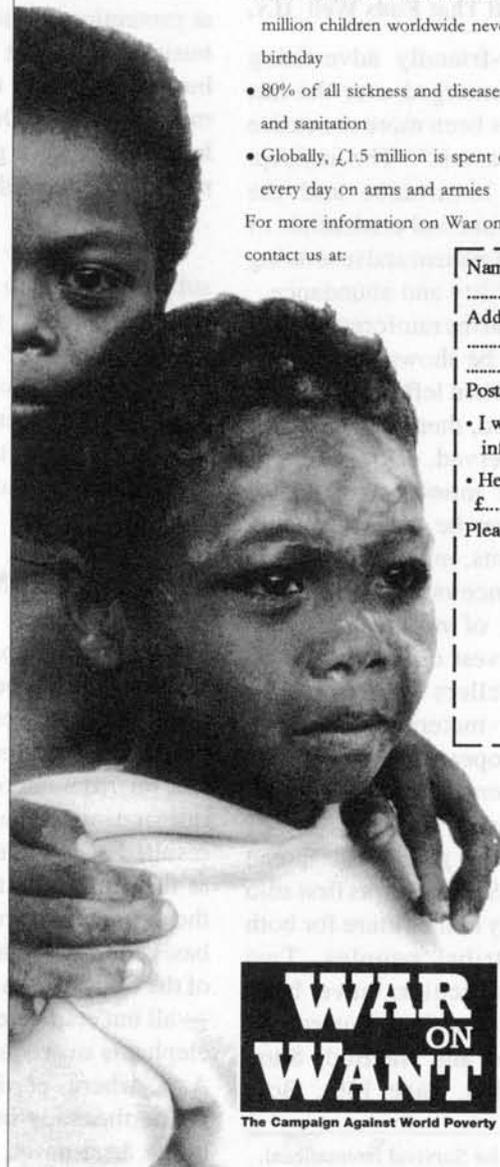
Universal human rights will never exist while:

- One in three of the world's children are malnourished
- One in four people worldwide are without adequate homes
- Lack of decent healthcare means that every year 40 million children worldwide never see their first birthday
- 80% of all sickness and disease is due to unsafe water and sanitation
- Globally, £1.5 million is spent every minute of every day on arms and armies

For more information on War on Want's work please

contact us at:

Name.....
Address.....
Postcode.....(HRD)
• I would like a campaign information pack
• Here is my donation of £.....
Please send to:
<b>War on Want</b>
<b>FREEPOST</b>
<b>Fenner Brockway</b>
<b>House</b>
<b>37-39 Great</b>
<b>Guildford Street</b>
<b>London SE1 0YU</b>



# The Rainforest Harvest

## Who Reaps the Benefit?

by  
Stephen Corry

*In the last four years, products that have long been available on the international market — in particular Brazil nuts — are now being marketed as a way of saving the rainforests and supporting indigenous peoples. These claims are highly misleading: much of the “rainforest harvest” is purchased on the open market, often from unscrupulous dealers; and even when indigenous people do become directly involved, they find themselves at the mercy of economic forces. The hype surrounding the harvest serves to deflect attention from the more critical question of land-tenure. Support for indigenous people should be channelled, not into purchasing forest products, but into a worldwide demand for respect for their rights.*

**"And believe this of me: there can be no kernel in this light nut; the soul of this man is his clothes; trust him not in matter of heavy consequence."**

William Shakespeare  
All's Well That Ends Well II.v.

Of all the planet-friendly advertising slogans that have emerged over the last few years, none has been more evocative than “rainforest harvest”. The concept links the exotic luxuriance and the impeccable environmental credentials of tropical forests with ancient and reassuring associations of fertility and abundance.

The theory behind the rainforest harvest is simple: if it can be shown that forests are of more value when left standing than when they are felled, then they are more likely to be preserved. This value is expressed in the monetary price of products which can be extracted from forests, mainly fruits, nuts and cosmetic oils<sup>1</sup>—the subsistence value of traditional forest products is of no account. Proponents of the harvest claim that it will assure forest dwellers an income as producers of raw materials for North American and European consumers, and that they will become more secure and empowered as a result.

The idea has been given widespread publicity since 1989 when it was first sold to the press as a key to the future for both rainforests and tribal peoples. Two companies, in particular, have been involved, Cultural Survival Enterprises in the United States, and The Body Shop in the UK (see Box, page 150). Both

companies have extolled the virtues of the rainforest harvest in glowing terms and compared it favourably with other projects. “Trade is much better than a handout and it will be far more effective at protecting forest people . . . It’s good business, not just for business, but for human rights and the environment.”<sup>2</sup> Or more recently: “One of the best ways to help indigenous groups preserve their native lands is to discover markets for . . . products.”<sup>3</sup>

But strip away the advertisers hype, subject the idea to serious scrutiny and a different picture emerges. So far, the harvest has done nothing to empower indigenous people or to protect forests; instead it has diverted the public’s attention from more critical matters, including the demand for indigenous land rights.

### The Colonial Market

Marketing forest products is by no means a new idea — throughout the colonial era tropical forests were regarded as a source of raw materials for the European market. But far from encouraging conservation, international marketing has usually resulted in products being over-exploited to the point of extinction. For example, the extraction of rubber and ivory — the basis for the brutal colonial domination of the Congo basin in the late 19th century — all but eradicated the rubber vines and elephants over vast areas. In South-East Asia, where, particularly in the last 20 years, the trade in hornbill ivory, rhino horns, bear paws, bezoar stones, gaharu

incense and birds’ nests has led to over-extraction and eventually the local extinction of species, and so the demise of the trade itself.<sup>4</sup>

The history of colonialism shows that rural inhabitants, including indigenous peoples, have not become more secure or empowered by supplying raw materials for foreign markets. At best they have become exploited and dispossessed of their lands; often they have simply been exterminated.

### The Regional Market

Nevertheless, given a choice, indigenous groups often want to get a cash income from selling some product. Many have been doing so for years, if not generations. This often involves outside intermediaries; for example, practically all Roman Catholic missions in rainforest areas — and there are thousands of them — encourage indigenous people to market their produce. A few of these outside organizations do this fairly and honestly, many do it unfairly and dishonestly.

Often, marketing schemes arise from the people themselves and are under their control. Ideally, these are appropriate to the group’s economic and social situation, lead to genuine economic independence from exploitative middlemen, and promote cohesiveness rather than division within the community concerned. Profits belong to the community which is under no coercion if it wishes to abandon the scheme. In the words of one indigenous alliance: “The priority for such initiatives

Stephen Corry works for Survival International.

is to secure control over our territories and resources on which our survival depends".<sup>5</sup>

The main difference between these usually quite small-scale enterprises and the proposed rainforest harvest is that the former are usually geared to supplying a local market with a food crop or some handicraft; the harvest, on the other hand, by definition involves producing for a foreign buyer<sup>6</sup> who controls the project and will often use the raw material in goods such as candy bars, hair conditioner or even dog food (which is now marketed in the US under a rainforest label).

There is another difference: no one has ever promulgated the fanciful idea that small-scale regional marketing will help preserve the rainforest. It may provide some cash income; but no one has claimed that it will save the planet or provide an instant solution for tribal societies who grow or gather most of their food, and who face an entirely different set of problems — the main one being the invasion and expropriation of their lands.

## The Hype Market

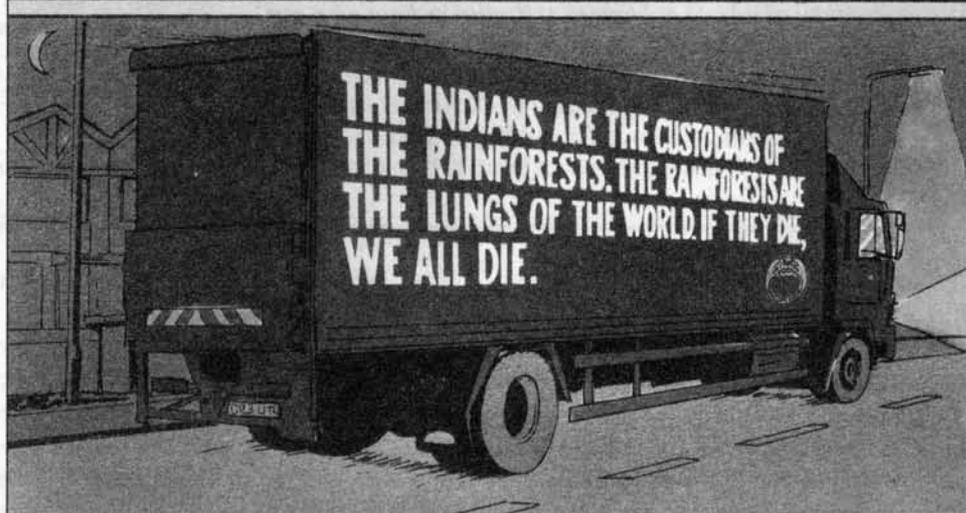
Such inflated claims, however, are repeatedly made for the rainforest harvest. But although many indigenous peoples will see the "harvest" as an opportunity to make some money, it will not empower their communities. In becoming dependent on a foreign intermediary, people will be entering into the same relationship of dependence and patronage as any of the traditional forms of exploitation through which the wealthy dictate trading terms to impoverished people and countries.

If the "harvest" spreads, it will affect only a few, selected rainforest communities — those which are near viable methods of transport, which have something of interest to outsiders, which have the time and desire to harvest for cash instead of for subsistence, which are able to cope with receiving and allocating considerable amounts of money<sup>7</sup> and which have been approached by a foreign company willing to buy from them. A handful may earn a lot of money, even get rich. But they will have no influence over this: they will earn as much, or as little, as the company wants to pay. They will not control the transport of their product to the market or have access to a range of buyers; the markets and buyers are thousands of miles away, operate in a

different culture, in a different language, with a different currency, and are driven by profit. When the forest communities become dependent on the monetary income earned, their future will be entirely at the whim of the company, at the mercy of consumer demand in the rich countries — demand which can fast fluctuate or collapse. Should the company change its mind about the price, or the amount it wants to buy, or should it want a different product, or to pull out of the deal altogether, the community would be able to do absolutely nothing about it.<sup>8</sup> Many, possibly all, of the "harvest"

schemes use seed finance in the form of loans rather than grants. This suggests that the forest communities concerned are being tied to the product in a way which is not so different from the old system called "debt-bondage" which chained hundreds of Amazonian communities to a "boss" — the *patrón* or *patrão* — who advanced loans against produce at extortionate rates.

For people who are already producing for markets, harvest projects simply replace one boss for another, locking those who collect the product into another chain of dependency; one which may be worse



Planes and trucks speed through the night to keep the world's lungs and Western skins in good condition — an extract from a Body Shop publicity cartoon.

# Combine Harvesters

The principal proponent of the rainforest harvest is the US organization, Cultural Survival Enterprises, a commercial offshoot of the group Cultural Survival, which describes itself as "the international advocate for the human rights of indigenous peoples".<sup>1</sup> Within the parent organization, there are some members who have doubts about the rainforest harvest. But the trading group, staffed with graduates from top business schools, is now the biggest part of Cultural Survival in terms of turnover and staff.<sup>2</sup>

Cultural Survival receives loans from the US government. "US AID recently lent Cultural Survival Enterprises \$3 million to finance trade in Non-Timber Forest Products and to lend to local Amazonian producer groups".<sup>3</sup> It also receives money from more unusual groups: Turtle Tours Inc. of Carefree, Arizona, which promotes tourism to "primitive tribes still emerging from the Stone Age", donates \$50 to Cultural Survival for every tour booked.

The harvest idea is largely the brainchild of Cultural Survival: "Cultural Survival created this concept for consumers and is responsible for virtually all rainforest products on the market that promote conservation".<sup>4</sup> Most of the other sellers of harvest products, such as Ben and Jerry's Ice-cream, and the Blue Planet Trading Company, purchase these through Cultural Survival.

The company's flagship project in Brazil involves a community of rubber collectors at Xapuri in Acre who are not indigenous people. The group was provided with "a total of \$140,000 . . . in the form of one-year, 10% interest, working capital loans".<sup>5</sup> According to Cultural Survival, the nut producers "have been a little unhappy with us," and one of their leaders, "has criticized us for trying to squeeze him".<sup>6</sup>

Outside the United States, the cosmetic company, The Body Shop is the main promoter of the harvest. The Body Shop provides Cultural Survival with funds and the two companies are closely linked.

Although The Body Shop began in England, its ideas (and its name) borrow heavily from the kind of American entrepreneurial thinking most often associated with McDonalds restaurants. Body Shops worldwide strive to look and smell the same. Its staff are encouraged to identify with the company through training sessions and in-house videos. The Body Shop currently has shops in 41 countries, including some of the most repressive to tribal peoples such as Indonesia and Malaysia.

The Body Shop's Brazilian project is in a settlement of Kayapó Indians. Some of the Indians provide the company with Brazil nut oil. But others have complained bitterly that the project is very divisive because it favours only a small group in the community. The Body Shop's agent there has admitted that the community's financial accounts became mixed up with those of individuals. The resulting internal jealousies and divisions recently ruptured the community.

## References

1. Cultural Survival, *Action for Cultural Survival*, Cambridge, US, 1992.
2. Cultural Survival, *Annual Report*, 1991, pp.90-91.
3. Clay, J., *Report on Funding and Investment Opportunities for Income Generating Activities that could Complement Strategies to Halt Environmental Degradation in the Greater Amazon Basin*, unpublished, 1992.
4. Cultural Survival, *Frequently Asked Questions and Answers About Cultural Survival Enterprises*, Cultural Survival, no date.
5. Clay, J., *op. cit.* 3.
6. Dennett Colby, C., "Has Rainforest Crunch Gone Sour?", *Toward Freedom*, Vol. 41 No. 6. Burlington, Vermont, 1992.

than if the community dealt with local buyers for local markets. Then, at least, the price would be verifiable and the expectations realistic. The harvest community might or might not earn more cash than its neighbours, but the only partner empowered by the process would be the foreign company. In the words of the national Colombian Indian organization: "Our communities' independence is . . . weakened as our well-being is made dependent on western markets. There are many outsiders who are interested in profiting from our resources, manipulating environmental and indigenous issues for their own gain."<sup>9</sup>

## Rainforest Crunch

The principal harvest product — the one which has received most of the press attention — is Brazil nuts. The flagship of the harvest, indeed the only product which has become at all well known, is "Rainforest Crunch", a candy bar containing Brazil nuts from the Brazilian tropical

forest and many other ingredients which have nothing to do with rainforests.

"Rainforest Crunch" was originally sold with the following claim on its packet: "The nuts used in Rainforest Crunch are purchased directly, with the aid of Cultural Survival, from forest peoples." In fact, this was not true. The Brazil nuts used do come from rainforest areas, but for two years or so, all of them were bought on the normal commercial market.

The Brazil nut industry is a well-established extractive business (with a turnover of \$20 million in 1989) which relies on an unskilled and poorly paid labour force, and is dominated by the wealthy and powerful, not by indigenous communities. Workers' rights, minimum wages and unionization are all ignored or suppressed. Some of the nuts for Rainforest Crunch were acquired from exploitative suppliers who saw their profits increase as a result.<sup>10</sup>

Cultural Survival's justification for making ethical claims for a product derived from commercial and ethically

dubious sources was that it first had to create the market for rainforest products; and that to do so it needed large quantities of the nuts, more than any "ethical" supplier could provide. The market has to be created because the product is entirely dependent on its publicity, on the invention of a new "need". Consumers are not really interested in buying a Brazil nut candy bar for itself, they buy it because helping to save forests makes them feel good. But in this case the "feel good" factor is a fake.

Even now, four years after the scheme started, none of the product comes from indigenous peoples. Some of the Brazil nuts are collected by non-indigenous rubber-tappers in the state of Acre. Yet Cultural Survival describes itself only as working on indigenous, tribal peoples' or ethnic minorities' issues — in none of its promotional literature does it include in its objectives any mention of helping non-indigenous communities, let alone suppliers and brokers. In fact, even non-indigenous forest people do not often benefit directly. Brazil nuts and copaiba

oil “are the only important supplies coming directly from forest people. Commercial suppliers and brokers provide most of the rest of what Cultural Survival imports.”<sup>11</sup>

The term “forest peoples” is still used in recent packaging, but the claim has been watered down. It now says: “Profits from the nuts we buy are being used to develop small Brazil nut processing factories that are cooperatively owned and operated by forest peoples.” There is no mention of who supplies the nuts used. The packaging for one of the several ancillary products now available, “Rainforest Crunch Popcorn”, makes even vaguer claims, stating simply: “Thanks for helping us save the rain forest by buying this butter crunch nut popcorn. The Brazil nuts grow wild in the rain forest.”

Harvest advocates argue that the labels on their goods are an important educational tool. They say that they “use product packages to educate consumers about both rain forests and the peoples who live in them. In 1991, some 30 million Americans bought products that explained the importance of the rain forests, how consumers could help local groups protect their resources.”<sup>12</sup> Unfortunately the cocktail of half-truths and advertising clichés that appear on their products suggest that the public may be being deluded rather than enlightened.

## From Integration to Self-Determination

These delusions may be dangerous. Over the last quarter century, indigenous peoples and their supporters have worked hard to inform the public about the main threat to their survival — the invasion of their lands by outsiders and the denial of their land rights. When organizations were first formed in Europe in the 1960s to support tribal peoples’ rights, the philosophical debate centred not on land, but on what were seen as the opposing poles of “integration” and “isolation”. “Integration” was the philosophy promoted by governments. Fearful of anyone with a separate identity and eager to appropriate tribal lands, governments of all political persuasions declared that indigenous peoples were to be “elevated” into the rest of national society and “integrated” or “civilized”.

Indigenous peoples’ supporters recognized that “integration” spelt death for



*A market stall in Belem selling forest, medicinal herbs. Traditional consumers of rainforest products do not have pretensions to saving the planet.*

societies and individuals. But it was not until the emergence of indigenous peoples’ own organizations in the 1970s that support groups realized that the real fight was not against integration and for isolation, but was to support indigenous peoples’ right to self-determination — and that self-determination was dependent on recognition and enforcement of their right to the lands they use and occupy. For a century and more, from the Dawes Act in the US in 1887 which in effect annulled the treaties made with Native Americans, to the Pinochet government’s 1979 laws which broke up communal land holdings in Chile, the onslaught on land rights was all-encompassing. Support groups came to realize that what the military and missionary invasions had not completely achieved, new integrationist laws would finish. The fact that “integrationism” is now universally discredited is one of the successes of the campaign for tribal peoples since the 1960s.

Harvest advocates have absorbed much of this discourse and have appreciated the need to confront land issues. They argue that “Claims to land and resources are strengthened when indigenous peoples are actively and obviously engaged in using and managing their resources”.<sup>13</sup> By “actively and obviously,” they apparently mean profitably: elsewhere they argue that indigenous peoples “can strengthen land claims” by demonstrating “gainful use of the land.”<sup>14</sup> The Body Shop even suggests that profits could be used to buy back stolen property: “We help communities by encouraging profit schemes which go towards other kinds of local improvements — purchasing land

rights”.<sup>15</sup>

The message here is clear: tribal peoples’ land rights are linked to their joining the market economy and using land in a way society recognizes as “gainful” — rather than for hunting, gathering or growing subsistence crops. Land rights are related to profit and productivity for outside markets. This thesis conforms to the arguments which have been used by anti-Indian politicians, for example, in Brazil since the 1970s. It would find hearty endorsement from Costa Cavalcanti, the president of the once notoriously corrupt Indian agency, FUNAI, who said in 1969, “We do not want a marginalized Indian, what we want is a producing Indian, one integrated into the process of national development.”

On examination the harvest ideology is revealed to be essentially an integrationist argument dressed in green clothes; a retrograde philosophy which, if allowed to gain momentum, could set the movement for tribal peoples’ campaigns back 25 years or more by playing into the hands of those who want to oppose the movement for land rights. If allowed to take hold, it will be deeply corrosive to indigenous peoples’ struggle to teach the outside world that their land is not for sale and that they will not put a cash value on it.

## Turning Campaigners into Consumers

The danger of the rainforest harvest is that large numbers of Western consumers will buy these ideas along with their Brazil nuts. The harvest nuts are more expensive

than those exported through normal channels, because Cultural Survival has to pay a higher price to stimulate supply. Consumers have shown themselves willing to pay extra, because they have been told that they will do some good by buying the "right brand" as opposed to cheaper nuts which do not help anyone.

This was the message of the vigorous media onslaught which launched the harvest in the US in 1989. Both the establishment and alternative press liked the story and gave it far more column inches than any similar issue. The same year witnessed the most intense phase of the genocide against the Yanomami — one of the largest Indian tribes remaining in the Americas. Fifteen per cent of the Yanomami in Brazil died. Yet far more US consumers knew about Brazil nut bars coming from Amazonia than knew that the 500 year-old invasion of South America was alive and well and killing Yanomami children.

Herein lies one of the most important reasons why the harvest should be opposed by those concerned about justice for indigenous peoples. The huge advances in tribal peoples' rights secured over the last 25 years have resulted from a radical change in international public opinion. As indigenous peoples have fought their own battles, the general public's concern has acted as a shield, making it far more difficult for governments and armies simply to kill them. It has also helped to stop wars, force repressive dictators out and push governments into acknowledging environmental and human rights issues.

But the rainforest harvest, also, can only work if public opinion is firmly behind it; if consumers really think that, by buying these products, they are helping indigenous peoples and saving their forest homes. It is not difficult to understand why it is so easy to get press attention for this fairy story. For the last five or six years, widespread concern has been very effectively aroused about the future of the forests; and now the public is desperate for "solutions". With the claims made for the harvest, no one can lose. Consumers can consume even more, companies can make profits, forest communities can earn an income, the environment is saved. The causes of rainforest destruction and the invasion of tribal peoples' lands are not addressed.

The message to the consumer is this: do not worry about lobbying your Member of Parliament, or the timber importers, or



*A different kind of harvest. Yanomami women prepare bitter manioc for a festival in their communal house in Catrimani, Brazil.*

writing to governments, the press or companies, do not worry about mobilizing public opinion with international campaigns — just eat more Brazil nuts. "Purchasing products through Cultural Survival" the company claims, "is a way for consumers to transform their concern over human rights abuses and environmental destruction into action."<sup>16</sup> *Indian Unity* the newspaper of the national Colombian Indian organization,<sup>17</sup> describes the harvest as a "green swindle": "In Europe and North America people believe that only by buying certain products they are helping to protect tropical forests and indigenous peoples, this is called the 'rainforest harvest'. This is weakening the international campaigns in support of indigenous peoples' struggles . . . People think that by consuming some product they are guaranteeing our protection."

The level of publicity will have to be stepped up if the "harvesters" are going to meet their own targets. Cultural Survival's turnover stood at \$824,000 in 1991, but is projected to reach \$48 million in the "current five-year marketing strategy."<sup>18</sup> By the year 2010, it envisages "returning" nearly one billion dollars to "forest based groups". This cannot be achieved without a great deal of media attention extolling the virtues of the harvest. Such publicity is bound to eclipse serious human rights concerns.

### **Logging — Tomorrow's Harvest?**

The enthusiasm for "harvest" products may well prove to be a short-lived fad and eventually fizzle out. Even if this is the case, it will doubtless leave a residual

legacy; rainforest hype, like other forms of green, will continue to be used in advertising and packaging.

In this respect, an aspect which may be peripheral now could prove central in years to come. Advocates of the harvest play heavily on another piece of jargon, "Non-Timber Forest Products", which in practice means mainly fruits and nuts. But they have occasionally let slip that they believe timber could eventually play an important role in their schemes.<sup>19</sup> They tend to keep this to themselves because many of the organizations they are trying to seduce are fervently opposed to logging. The barely-whispered message is more or less identical to that peddled by timber importers, who have started their own campaign, called "Forests Forever", to counter the fierce criticism which has been mounted against their activities over the last few years. The timber traders say that judicious felling can preserve forests and is therefore environmentally sound.

It may be that careful logging could extract timber of greater monetary value than any fruit or nuts, without entirely destroying the forest. But there are enormous problems: no one has any idea if tropical rainforests can be logged sustainably or not; and logging is not and will never be carried out "judiciously and carefully" in countries where controls are ignored and corruption starts at the top.<sup>20</sup> For example, British mahogany importers are hiding behind Brazilian certificates attesting that their wood is not being taken from conservation zones or Indian reserves. These are falsified certificates: most of the imported timber now comes from Indian areas.

Harvest advocates say that higher prices paid for forest produce will promote conservation. But higher prices for timber translate into more intensive cutting and make extraction from more remote areas financially attractive.<sup>21</sup> They also result in the construction of more roads, and where the timber roads go, colonization and devastation soon follow. As Cultural Survival itself admits, "the development of markets for sustainably harvested commodities and the destruction of rainforests . . . both depend on . . . improved transport."<sup>22</sup>

## More Consumption

Timber production is the inevitable conclusion for those who pursue the logic of the rainforest harvest. This is not to suggest that harvesters are a front for the timber industry. They are, presumably, sincere in their belief that they are helping indigenous people. Their misplaced zeal derives rather from a deep cynicism, a belief that "development" is unstoppable. They have always held that resource extraction on indigenous peoples' land is inevitable, that big development schemes will go ahead regardless, and that tribal peoples will become absorbed into modern society. "Resource development of course cannot be halted" asserts Cultural Survival, which expects Indians to "flourish very well as fellow citizens in our own society"<sup>23</sup> and "become productive participants in multi-ethnic states".<sup>24</sup>

Such beliefs mirror the rhetoric of the World Bank, and Cultural Survival in fact works as a consultant to the World Bank. It shares the Bank's conviction that the problems caused by development can only be solved by more of the same. Thus, although it is overconsumption by Western markets that has caused much of the rainforest destruction, people are now being exhorted to increase their consumption still further as a way of conserving forests and supporting the people who live in them. However, encouraging tribal peoples to enter global markets to satisfy an artificially-created demand for faddish products, such as Brazil nut candy or hair conditioner, will not promote tribal peoples' self-determination and will not solve their problems. Far from giving forest dwellers more security and control over their own lives, it is more likely to have the opposite effect.

It is vital for the future of indigenous peoples' rights that the harvest ideology

is rejected and that support for them is channelled, not into purchasing power for trivial commodities, but into a worldwide outcry demanding respect for their rights. The situation for these peoples will begin to look secure when ordinary (non-indigenous) people believe that tribal peoples' land should not be stolen from them under any circumstances.

The alternative is to conserve only those wildernesses which can pay their way, and stand up only for those among the dispossessed who produce something we want. Are we going to let business and profits dictate conservation and human rights' strategies and goals?

## References

1. Harvesters are also looking at extracting ingredients for pharmaceutical products from the forest, but this raises the different question of "intellectual property rights", not discussed here. See, Gilbert, D. & Colchester, M., *Indigenous Peoples and the International Biodiversity Programme: Some Implications*, Survival International, London, 1989; Posey, D., "Intellectual Property Rights", *Anthropology Today*, Vol. 6, No. 4, London, 1990; World Rainforest Movement, *Biodiversity: Social & Ecological Perspectives*, WRM, Penang, 1992.
2. Forster, J., *Trade Not Aid and the Body Shop's Kayapo Project*, Littlehampton UK, 23 June, 1992.
3. Christensen, J., "Marketing the Rainforest to Save It", *Baltimore Sun*, 30 July, 1989; Solo, P., *Cultural Survival Appeal*, Cambridge, USA, December, 1992.
4. Gray, A., "Indigenous Peoples and Marketing of the Rainforest", *The Ecologist*, 20, 6, 1990.
5. International Alliance of the Indigenous Tribal Peoples of the Tropical Forests, *Charter of the Indigenous-Tribal Peoples of the Tropical Forests*, Penang, Malaysia, 1992.
6. Cultural Survival, *Frequently Asked Questions and Answers About Cultural Survival Enterprises*, Cultural Survival's Marketing Program, no date.
7. Clay, J., *Report on Funding and Investment Opportunities for Income Generating Activities that could Complement Strategies to Halt Environmental Degradation in the Greater Amazon Basin*, unpublished manuscript, 1992.
8. Roddick, A., *Body and Soul*, Ebury Press, London, 1991.
9. ONIC (Organización Nacional Indígena de Colombia), "Comercializando con la Selva", *Unidad Indígena*, 102/103, Bogotá.
10. Christensen, J., "Eco-Market No Quick Fix for Rainforests", *Pacific News Service*, 6-10 May, 1991.
11. Long, W. R. and Fox, K., "Rainforest Chic", *Los Angeles Times*, 10 September, 1991.
12. Cultural Survival, op. cit. 6.
13. *Cultural Survival Annual Report 90-91*, Cambridge MA, USA, 1991.
14. Jahnige, P. J., "Project Letimaren: Indigenous Resource Management in Ecuador's Upper Amazon", *Cultural Survival Quarterly*, 13, 4,

- 1989.
15. The Body Shop, *Fair Trade Broadsheet*, Littlehampton, UK, 1991.
16. *Cultural Survival Catalogue 1992*.
17. ONIC op. cit. 9.
18. Clay, J., op. cit. 7.
19. "In the short term, at least, AID should support some of those international efforts to develop markets for NFTP's, sustainably harvested timber, or medicines that benefit local populations". Clay, J., op. cit. 7.
20. Colchester, M., *Pirates, Squatters and Poachers: the Political Ecology of Dispossession of the Native Peoples of Sarawak*, Survival International/INSAN, Petaling Jaya, 1989; "Guilty until Proved Innocent", *The Ecologist* 20, 3, 1990; "The International Tropical Timber Organisation: Kill or Cure for the Rainforests?" *The Ecologist*, 20, 4, 1990; Johnson, N. and Cabarle, B., *Surviving the Cut: Natural Forest Management in the Humid Tropics*, World Resources Institute, Washington DC., 1993.
21. Gregersen, H., Lundgren, A. & Lindell G., *Contributions of Tropical Forests to Sustainable Development: the Role of Industry and the Trade*, manuscript for ITTO Seminar on Sustainable Development of Tropical Forests, Indonesia, 19 May, 1990; Reitbergen, S., "Africa", Poore, D. (ed.), *No Timber without Trees: Sustainability in the Tropical Forest*, Earthscan, London, 1989.
22. Clay, J., op. cit. 7.
23. Maybury-Lewis, D. (President of Cultural Survival), public talk, London, 17 June, 1992.
24. Cultural Survival, *Aims and Methods of the Organization*, no date.

## ELECTROMAGNETICS NEWS

A quarterly news report on the health effects of electromagnetic fields, from powerlines, VDUs, microwave systems, etc., as well as their positive use in orthodox and complementary medicine.

Edited by Simon Best, co-author with Dr Cyril Smith of *Electromagnetic Man* (1988), shortly reprinting in updated edition.

Vol. 4 (1993): £20 (individuals), £46 (companies). Overseas add extra postage: Europe £1.50; N America/S Africa £3.00; Australasia £4.50. Add £5 if paying by non-sterling cheque (no cards) to cover exchange. Send sae for further details and list of back issues available and advertising rates. Make cheques payable to: *Electromagnetics News*, PO Box 25, Liphook, Hants GU30 7SE.



## Books

### Safe — For Whom?

**DEATH ON THE STREETS: Cars and the mythology of road safety**, by Robert Davis, Leading Edge, The Old Chapel, Burtsett, Hawes, North Yorkshire DL8 3PB, 1993, £11.99 (pb), 300pp, ISBN 0-948135-46-8.

The good news from the Department of Transport (DOT) is that fatal accidents on Britain's roads are at a post-war low. This, the Department claims, proves the success of its road safety policies, especially building motorways and bypasses. Such roads are far safer than other categories of road, and thus "enhancing road safety" is one of three objectives set out in *Roads for Prosperity*, the government's 1989 roads manifesto.

Those who oppose the present road-building mania may feel uncomfortable with these facts. How can you oppose a bypass when it is going to save lives? The DOT has all the figures: you can't argue with statistics, can you?

Robert Davis's authoritative analysis enables you to do so. He aims to "blow away the smoke-screens that have been set up around the issue of safety on the road". In relating the history of road safety, he shows how it has been organized in the interests of car manufacturers and the roads lobby which use false criteria and manipulate statistics to assess safety. He shows how road safety has become a political tool wielded in favour of the hegemony of the car and against the rights of more vulnerable road users.

The use and misuse of language is central to the theme. When the DOT claims that travelling by car is much safer than walking, it makes two fundamental errors, one mathematical, the other linguistic. It relates accident rates to the

distance travelled, rather than to the number of journeys, and thus overlooks the way that people use cars to increase the distances they travel, whether to work, to shop, for leisure, or to take their children to school. The DOT does not even count journeys under one mile, thus leading to an overestimate of the proportion of journeys made by car and a massive undervaluation of walking.

Davis's analysis for accident rates finds that, per hour of travel — a more accurate indicator of journeys than per mile — the supposedly "safe" motorway has a higher fatality rate than the ordinary main road. If overall casualties per journey are considered, car use may be less safe than walking, even using the Department's definition of safety.

Turning from numbers to words, the very word "accident" is a misnomer, most such events being the consequences of deliberate violations by motorists of road traffic law and the highway code.

More importantly, the DOT confuses two separate meanings of "safety" — "transitive" and "intransitive" safety. Car users are less at risk from other road users, such as pedestrians and cyclists (intransitive safety), while pedestrians cause fewer risks to others (transitive safety). But conversely, pedestrians are more at risk from other road users (intransitive safety) because car users cause more dangers to others (transitive safety). The road transport industry always focuses on the intransitive safety of car users — are they themselves safe rather than are they safe for others? — with the result that motor danger (as opposed to "road safety") is actually increased.

Consider some of the "road safety" advice commonly given to different road users — to car users: drive a "crash-

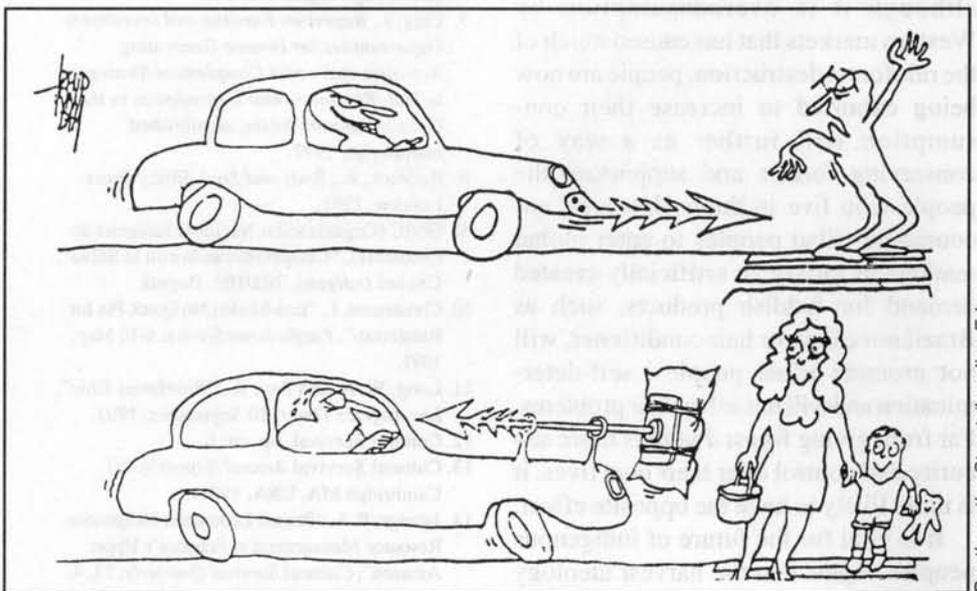
worthy" car (one with crumple-zones, roll bars, airbags), wear a seat belt, drive a larger car because it's safer; to pedestrians: be conspicuous, walk on the underpass, stay on the pavement; to cyclists: be conspicuous, wear a helmet; to children: don't play in the road, roads are for cars.

Now consider the effects. Many car users convert their safety gains into performance gains, a process known as risk compensation. Large cars cause more damage to small cars (or people) on impact. Davis cites a television advertisement for a Volvo car in which a dummy driver walks away unscathed from a spectacular crash involving no other vehicle. The advert does not show what happens to, say, the dummy pedal cyclist when hit by a "safe" Volvo travelling at 30mph.

Pedestrians are simply told to get out of the way. Underpasses, however, pose a new danger, or at least a new fear, of being mugged or attacked, thus reducing freedom of mobility. The pavement is not much safer. When MP Tony Banks complained in 1989 that one-third of pedestrians injured in road accidents were on the pavement, the government Minister replied that this meant the other two-thirds were in the road "where they should not be".

Much the same applies to cyclists, who are routinely blamed for their inconspicuousness. For many years, cycling organizations opposed compulsory rear lights on the grounds that they shifted the onus of responsibility for avoiding collisions from the driver of the faster, heavier, overtaking vehicle onto the would-be victim. Davis considers advocacy of cycle helmets to be another case of blaming the victim and ignoring the causes of damage.

And the children of today, who are



Death on the Streets/Leading Edge

taught that the road belongs to the car, are tomorrow's motorists.

The problem is not a lack of road safety, but an excess of motor danger. Traditional "road safety" measures simply do not deal with this. Consider a main road passing through a village. Invariably, the DOT gives a higher value to the right of motorists to drive through the village at high speed than to the right of residents to cross the road without fear of being murdered. This perverse valuation underlies the entire roads policy — indeed, the entire transport policy — of the British government. True road safety depends on political change to reverse this false valuation and make the motorist slow down and give way. Instead speeding motorists are rewarded by being promised a new road, and the DOT uses the dangers it has imposed on villagers to force them into supporting a bypass.

By talking in terms of motor danger, Davis can adopt a holistic view that encompasses not just accidents, or dangerous driving habits, but also issues such as pollution, congestion, loss of green space, community severance, changes in retailing methods and loss of public transport revenue. It becomes clear that road-building always increases motor danger.

The costs of this danger should also be taken into account. For instance, in estimating total road costs of £35-£87 billion a year, Davis quotes a figure which is the cost of escorting children to school, a figure higher than the total amount currently paid in motoring taxes. The proposed A36 bypass of Salisbury will force parents who escort their children to and from a local primary school to walk an extra 100 miles a year. According to the DOT, this will be "reasonably convenient and no less safe".

Every group campaigning against a road scheme will need this book. Although it draws on the British experience, it has wider relevance for any part of the motorized industrial world. Robert Davis cuts through the mythology of road safety to present a new understanding of the subject, through which we can challenge the current road safety paradigm which increases motor danger, promotes the dominance of the car, and marginalizes and victimizes those who cannot, choose not, or would prefer not to be motorists.

*Hamish Soutar*

Hamish Soutar is editor of a Green community paper in Salisbury, Wiltshire, and an objector to the proposed A36 Euroroute.

## Culture Clash

**NUCLEAR SUMMER: The Clash of Communities at the Seneca Women's Peace Encampment** by Louise Krasniewicz, Cornell University Press, Ithaca NY, 1992, \$14.95 (pb), 280pp. ISBN 0-8014-9938-0

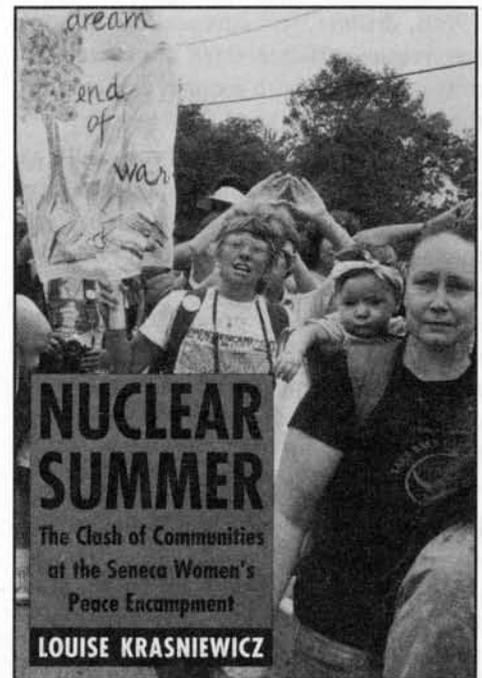
It is always interesting, if a bit sobering, to see yourself as an anthropologist sees you. It is a bit like looking down the wrong end of a telescope. You carry with you all the dreams, fears, aspirations and inconclusive conversations that led you to a certain course of action and you remember what led to what, but often the whole picture escapes you. Not so for the anthropologist who looks back at the phenomenon that was you.

The women's camp at Seneca was set up in 1982, based on the precedent of the women's camp around the cruise missile base on Greenham Common in Berkshire. For me, the interest of anthropologist Louise Krasniewicz's book lies partly in the important ways in which Seneca and Greenham differed.

I was familiar with the apparent spontaneity of events at Greenham Common, the illegality of camping there, the attendant fear and vulnerability, the regular destruction of personal belongings and tents, and the vagrant nomadic sense of living in the narrow space between two different societies — that of the local residents and that of the US nuclear weapons arsenal. Not until women had established in the courts the precedent of staying on common ground did they have any legal backing.

The Seneca camp, however, was founded on land bought by the women, not land which had belonged to the people since the Middle Ages (until it was usurped by the military). It began as a "summer camp" in a country where summer camping is assumed to be a safe, normal, healthy activity, mostly for children. The Seneca camp was there to protest against the use of nuclear weapons, not against the installation of a foreign power.

One of the most interesting aspects of Greenham was the way in which we came to realise not only that we did not want cruise missiles in our country, but that we could be perfectly happy without most of the things we had assumed we needed, such as houses, kitchens, gadgets and



protection from the world, as we sat in the mud around campfires with the missiles only yards away. The camp showed us what we really needed — company, solidarity, support from other women, acceptance, practical sharing. This was the social message of Greenham, and it changed many women's lives in Britain in profound and far-reaching ways — in shorthand, it was "overturning the patriarchy".

Similarly, the Seneca camp challenged assumptions about what is normal and necessary, what might be agreed upon, in fact, about life in the United States. Thus the clash of communities — the women's peace camp and the "residents" — in Seneca and the Finger Lakes area in the summer of 1983 was between two opposing ways of life. What was at stake was the concept of what is acceptable in the American way of life.

The way in which people see themselves is usually a mixture of reality and fantasy.

"The encampment . . . imagined itself as a united group of women with spiritual, political, emotional and physical bonds built on a foundation of common womanhood. The local residents . . . saw themselves as one cohesive uniform group of simple, conservative, peace and quiet loving people living in the typical rural small town in America where dramatic occurrences are rare, people are friendly and helpful and outsiders are rightly viewed with suspicion."

The images that clashed were those of troublemaking hippies left over from the

1960s, drifters, lesbians and exhibitionists versus self-interested conservatives only concerned with security and putting their heads in the sand.

Louise Krasniewicz analyzes well, as an anthropologist should, the significance of the images and the reality in between them. She encourages reflection on how easy it is to get into collective imagining, seeing oneself as a "goody", and thus to create a myth. This happened at Greenham as at Seneca. It spurred people into acts of courage that they might not otherwise have taken, but it also undermined their sense of reality in such a way that disappointment and blaming others in the camp easily set in.

My reservation with *Nuclear Summer* concerns the anthropologist's role in a situation where others are putting their lives, or at least comfort and reputation, on the line. Is it possible to understand something without getting into it heart and soul? The author, by her own admission and her profession, holds back, watches, is not really "in" what is going on. An informed, readable book emerges in which sociological analysis and laundry lists, history and gossip are included cheek by jowl. It includes dialogue, menus from the Seneca army depot, analysis of reactions to lesbianism at a time of ill-informed and panicky thinking on the growing dangers of AIDS, social history, ethnography, personal narrative and critique of existing systems — all extremely interesting and valuable.

Anthropologists write anthropology, and you cannot criticize an American anthropologist for turning her eye upon her own culture, starting to take it carefully to pieces. Westerners need to demolish the myths of their own cultures, not those of other peoples. We should not take things as necessary or as given. But can anybody — anthropologists included — really understand what they have not wholeheartedly committed themselves to, if only for a while? Therein lies the dilemma that this book bravely attempts to present but only partly achieves.

In itself, though, *Nuclear Summer* sets a good precedent by asking the right question: how do we find a way to examine our own behaviour and chronicle the events of our own lives and times?

Rosalind Brackenbury

Rosalind Brackenbury is a poet and novelist who writes regularly for *Resurgence*.

---

## Democratic Mosaic

---

**THE MAKING OF SOCIAL MOVEMENTS IN LATIN AMERICA: Identity, Strategy, and Democracy**, edited by Arturo Escobar and Sonia E. Alvarez, Westview Press, Boulder, CO and Oxford, 1992, 383 pp (sc) £12.95/\$19.95 ISBN 0-8133-1207-8.

In the 1970s, civilian governments across Latin America fell to military dictatorships. People responded to insupportable economic policies and repressive politics by forming a mosaic of small, sometimes interacting, movements. Women played an especially visible role in the resistance, forming soup kitchens to feed the poor, fighting as guerrillas, or drawing on their identity as mothers to condemn such politics publicly when few dared to raise their voices.

*The Making of Social Movements in Latin America* explores the efflorescence and unprecedented diversity of these movements within the last twenty years. Authors from a range of disciplines have contributed a dense but unique collection of studies.

Arturo Escobar's chapter, "Culture, Economics and Politics" in the opening theoretical section perceptively links the proliferation of movements to the discourse of development, while Norma Stoltz Chinchilla provides a lucid analysis of the often thorny relationship between feminist and Marxist movements in a struggle for democracy.

These movements tend to create new identities for their participants as they challenge the status quo. Latin Americans have come to identify themselves with the neighbourhood, the Christian Base Community, the squatter's collective, or their historical relationship with the land. How these informal movements maintain their identity and integrity over time and why some movements are more successful than others is the focus of strategy-centred approaches to the study of social movements. Just as this book brings together disparate case-studies, so many of the chapters in the second and third sections blend usually divergent identity- and strategy-centred considerations fruitfully.

These studies vary as much in quality as in subject matter. "Feminisms in Latin America" was particularly disappointing; it is more a manifesto for the notion that

differentiated strands of feminism are alive and well in Latin America than a study of the conditions under which such differentiation has become meaningful and effective. Amy Conger Lind's "Power, Gender and Development", a study of popular women's organizations in Ecuador, however, provides a closer analysis which persuasively challenges the prevailing assumption that poor women mobilize in pursuit of basic needs — as opposed to more enduring change in the social (gender) order.

The chapter on the Venezuelan ecology movement is informative but taxonomic. Edward MacRae's study of homosexual identities in Brazil highlights the difficulties of a movement whose identity is predicated on a refusal of hierarchical or even democratically centralized relations. This raises the important question of how to manage the splintering that occurs in the absence of formal power.

Cathy Schneider's essay questions why some neighbourhoods actively protested against the Pinochet regime in Chile, while others were relatively passive. She traces activism in some areas to "a historical connection between these areas and the Chilean Communist party" which emphasized the creation of skilled grassroots leaders.

Orin Starn's well-written article on *rondas campesinas* ("peasants who make the rounds") in Peru illustrates how a community-run, vigilante patrol against thieves in a rural hamlet spread to thousands of hamlets across the Peruvian Andes and:

"evolved into an entire alternative justice system with open community assemblies to resolve problems ranging from wife-beating to land disputes".

Her generous description of the land and the peasants makes the immediate and ultimate concerns of people in the movement vivid and intelligible, as does John Burdick's analysis of the attraction of the evangelical Pentecostal church over the revolutionary Christian Base Communities in a Brazilian town. He attributes the success of "The Assembly of God" to its flexibility; it does not require literacy or extra time which the Catholic communities demand but most Brazilians lack. Burdick shows how the opportunity for instantaneous and radical personal transformation appeals to some of the most oppressed (and numerous) people in Brazilian society, such as women and blacks.

The richness of these studies and the

challenges they pose to notions of democracy drawn from European and North American experiences make a valuable contribution to understanding contemporary Latin American society. Mexican shantytown movements, Peruvian *rondas campesinas*, and Colombian indigenous authorities all began far from the polling-booth, yet they achieve democracy in its most radical aspect: the collective exercise of self-determination.

More generally, these studies shed light on the promise and limits of social movements in contexts hostile to the democratic impulse. If the abuses of the state and global capital are the chief catalysts for these movements, they are also formidable opponents. As Escobar points out, continued resistance entails nothing short of "the reconstruction of economies" and "of meanings at all levels, from everyday life to national development".

Bridget Clarke

**Bridget Clarke** recently completed a postgraduate thesis in social anthropology on women's movements in contemporary Latin America.

## Environmental Doublespeak

**EARTH IN THE BALANCE: Forging a New Common Purpose**, by Albert Gore, Earthscan, London, 1992, £14.95 (pb), 407pp. ISBN 1-85383-137-9.

The election of Bill Clinton as President of the United States raised tremendous hopes among environmentalists. Even in its early days, his administration advanced several proposals long sought by the environmental mainstream, such as an energy tax. Most of the emerging policies, however, reflect the notion that environmental protection should be compatible with an expanding, global, corporate economy. How will the administration promote these environmental commitments while continuing "business-as-usual"? *Earth in the Balance* provides a clue.

Even before Senator Albert Gore was selected to run for Vice-President, his book had received enthusiastic reviews from a wide political spectrum of environmental activists. Not only does he take great pains to explain the scientific evidence for global climate change and the policy implications of impending water and food shortages, but he also

demonstrates an impressive understanding of the cultural, ethical, psychological and theological implications of the ecological crisis.

Despite an urgent battle cry for change, however, Gore consistently defers to corporate interests and the myth of American superiority. For example, he rounds off a meticulous discussion of the declining genetic diversity of food crops, the failure of the "Green Revolution" in agriculture, and the petrochemical buy-out of the seed industry with this apologia: "What is troubling about such developments is not the involvement of multinational chemical companies *per se*. They have management skills, resources and global capabilities that could be useful in addressing some of the strategic problems that affect the world food system" — when he has just described how these same companies create such "strategic problems".

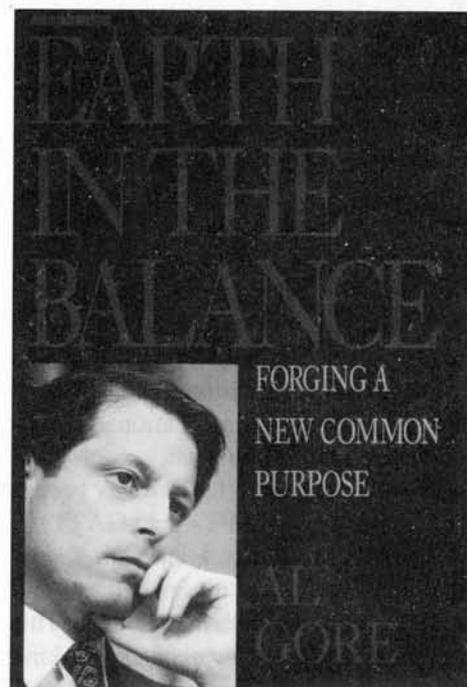
Gore's continual invocation of "the stunning victory of free market economics over communism in the global war of ideas" signals the idea that the same methods, "American spirit", sense of a "grand purpose" and "powerful tools" of capitalism which "won" the Cold War should be mobilized against the destruction of the earth. In a different political climate, such rhetoric would have raised concerns, even among mainstream liberals, about Gore's motives and his ties to the military-industrial complex. Today, it is not mentioned.

The centrepiece of *Earth in the Balance* is a comprehensive policy to address the ecological crisis, or rather, in the language of US militarism, to confront new "strategic threats", because short-term measures are just:

"forms of appeasement designed to satisfy the public's desire to believe that sacrifice, struggle and a wrenching transformation of society will not be necessary . . . The new ideology of consumption . . . fosters the assumption that we are separate from the earth. It is this strange and destructive way of thinking about our relationship to the physical world that is our real enemy."

For someone in Gore's position, this is a far-reaching statement. If he were more direct about being a spokesperson for the corporate elite, it would be revolutionary.

Gore's call for collective responsibility is instead another attempt to diffuse accountability for the crises created by global capitalism which merges well with the initiatives of "green" corporations



and the "planetary managers" at the World Bank.

His "Global Marshall Plan" to heal the earth is conceptually different from the post-Second World War one, especially in its emphasis upon voluntary, cooperative agreements and professed sensitivity to the needs of people in different parts of the world. But just as the original Marshall Plan sought to strengthen capitalism by alleviating suffering in Europe selectively, Gore's commitment to people in the Third World becomes a crusade "to remove the bottlenecks presently inhibiting the healthy functioning of the system".

His plan reflects many of the lessons of current political debates in the environmental movement. He rejects the demographic reductionism (and implicitly the racism) that often clouds discussions of global population growth and centres his programme for stabilizing population on the need to empower women, raise educational levels, reduce infant mortality, stem the excesses of highly extractive capital flight and promote a "more equitable distribution of political power, wealth and land". Specific proposals, however, revolve around debt-for-nature swaps and a system of tradeable emission credits for greenhouse gases. Both proposals in practice are instruments for the continued domination of Third World economies, albeit in a more subtle form.

Gore's discussion of alternative technologies reflects much collected wisdom about long-term sustainability, energy efficiency and local initiative. But his specific proposals — such as support for genetic engineering and "passively safe" nuclear power — reflect his subservience

to the corporate agenda.

The book's economic proposals revolve around the need to change conventional measurements and uses of GNP, productivity and discount rates so as to remove the bias of short-term gain over long-term sustainability. Gore proposes a tax on carbon dioxide emissions to subsidize more benign technologies, a "virgin materials" fee on manufacturing to pay for recycling and several incentives to promote energy efficiency. He calls for a new generation of international agreements to "restore the earth's ecological balance" (even though Gore has been a key supporter of NAFTA and GATT).

*Earth in the Balance* ends on a spiritual note, invoking "inner ecology" and a deeply religious faith in the future. This optimism, however, is precisely the kind that allows growing numbers of corporate managers and politicians to invoke "ecological wisdom" while denying their own complicity in the continuing destruction of the earth and its peoples. In this unprecedented age of environmental doublespeak, the most flagrant polluters win awards for "greening" their production processes, while liberal environmentalists promote clean, "green" economic growth.

In practice, even Gore's moderate environmentalism is considered too radical by most in the Clinton administration. In the past few months, Clinton has proposed weakening regulations against carcinogenic pesticides, allowed the opening of a controversial toxic waste incinerator and reneged on his promise to cut subsidies for mining, logging and cattle grazing on public lands in the western states. He has agreed to sign UNCED agreements spurned by the Bush administration, such as the biodiversity convention, but only after reinterpreting them to meet the objections of corporate interests. Meanwhile, the Right has escalated its attacks against the ecology movement, playing upon the public's legitimate fears of bureaucratic control to advance the most regressive corporate agendas.

In such a climate, it is clear that the only hope for real change lies with the toxic victims in the US, Third World villagers and indigenous peoples — to name but a few of those who simply have no place in the brave new "Green" world of corporate environmentalism.

Brian Tokar

Brian Tokar is author of *The Green Alternative: Creating an Ecological Future*

## BOOKS DIGEST

- YEAR 501: *The Conquest Continues*, by Noam Chomsky, South End Press, Boston, 1992, \$14.00, ISBN 0-89608-444-2; Verso, London, 1993, £11.95 (pb), 331pp. ISBN 0-86091-680-4.

In this analysis of Haiti, Latin America, Cuba, Indonesia, and pockets of the "Third World" in the US, Chomsky draws parallels between the genocide of European colonial times and the exploitation associated with present imperialism. Current circumstances offer opportunities for popular democracy and freedom — or domestic facism.

- VOICES FROM THE AMAZON, by Binka Le Breton, Kumarian Press, West Hartford CT, 1993, \$14.95, (pb), 168pp. ISBN 1-56549-021-5.

Instead of considering the rainforest in terms of global warming or loss of biodiversity, the compelling words of Indians, loggers, river people, miners, settlers, ranchers and rubber tappers, recorded on a 3,000 mile journey, reveal the inhabitants' concerns and ideas about the Amazon.

- SONG FROM THE FOREST: *My Life Among the Ba-Benjelle Pygmies*, by Louis Sarno, Bantam Press, London, 1993, £14.99 (hb), 288pp. ISBN 0-59301-864-8.

The deep-rooted dependency of the Bayaka pygmies of the Central African Republic on initiatives outside their society — whether Bantu patrons, Catholic missionaries, a Yugoslav saw mill or the World Wildlife Fund — becomes clear through this travelogue and personal story of the author's two-year stay among them. Not leading the change themselves, the pygmies are now caught between the conservationists and the local élite.

- PLUNDERING PARADISE: *The Struggle for the Environment in the Philippines*, by Robin Broad with John Cavanagh, University of California Press, Berkeley, 1993, \$25.00 (hb), 213pp. ISBN 0-520-08081-5.

Filipino perceptions of the environment are brought alive by this traveller's tale through rainforests, prawn ponds, export processing zones and urban slums which combines facts and analysis with the voices of peasants, labourers, fishers and government officials.

- REBUILDING COMMUNITIES: *Experiences and Experiments in Europe*, edited by Vithal Rajan, Green Books, Devon, 1993, £9.95 (pb), 278 pp. ISBN 1-870098-50-1.

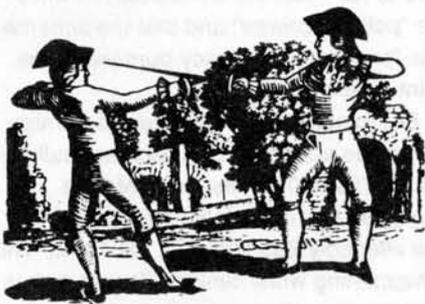
That real social transformation only takes place at a grassroots level is illustrated by these case studies of rural and urban communities from Finland, Portugal, Spain, Scotland, Italy, Greece and Switzerland which counter a more academic analysis of environmental politics, sustainability and biodiversity.

- GLOBALIZATION: *Social Theory and Global Culture*, by Roland Robertson, Sage Publications, London, Newbury Park CA, and New Delhi, 1992, £11.95(pb), 211pp. ISBN 0-8039-8187-2.

An alternative analysis to world-systems theory and other theories which regard globalization as a "Western project of modernity", this interpretation goes beyond global-local and universal-particular distinctions to highlight the political and economic significance of changing perceptions and participation in a compressed world.

- GENDER DIVISIONS AND SOCIAL CHANGE by Nickie Charles, Harvester Wheatsheaf, Hemel Hempstead/ Barnes & Noble Books, Lanham MD, 1993, £10.95/\$19.95 (pb), 306pp. ISBN 0-7450-0807-0.

Inequalities between women and men are rooted in spheres of production rather than reproduction, and linked to other forms of inequality and exploitation. So concludes this study of the control of women's labour by men, the involvement of women in reproduction and associated activities, and gender divisions of labour in different societies — capitalist and socialist, First and Third worlds, developed and hunter-gatherer.



## Letters

### Archaeological Heritage Destroyed

While thanking you for publishing "Piparwar: White Industries' Black Hole" (*The Ecologist*, March/April 1993), I will make the observation that the article lacks any mention of the archaeological heritage being destroyed by the Piparwar Project, directly and indirectly. It does not mention the authenticated palaeo-archaeological Bhagwantanr and Beinti megalithic burial sites which have been certified by the Archaeological Survey of India (Pre-history Department). In addition, new archaeological sites and rock art have been found more recently.

All of these are in danger of being wiped out. Pieces of rock art at the northwestern area of the Project are already flying off the painted sandstone surface due to blasting three kilometres away.

For some reason there has been a concerted attempt by the Ministry of Environment and Forests, as well as environment activists, to play down the archaeological heritage under threat. It was first done in the Narmada Valley and it is now again apparent in the Upper Damodar Valley. These sites represent the cultural and anthropological heritages in the North Karanpura Valley from earliest times to the present.

**Bulu Imam**  
**Regional Convenor**  
**Indian National Trust for Art and Cultural Heritage**  
Human Ecology Centre  
The Grove  
PO Hazaribag  
Pin-825 301  
Bihar  
INDIA

### Close Down the World Bank!

While I am an admirer of your excellent journal and fully support your radical and enlightened stance on the problems of environment and society, I am disappointed that you are not calling for the closing down of the IMF and World Bank, considering their long histories of incompetence and misuse of power. Surely they stand for everything *The Ecologist* is against — centralization, globalization and unaccountability?

I disagree strongly with Tim Lang and Colin Hines that the Bank should be radically overhauled ("The New Protectionism", *The Ecologist*, May/June 1993). Isn't the concept of a World Bank another form of enclosure? If Lewis Preston goes, another financial piranha will take his place and carry on as before, taking the public's money and spending it without their knowledge or consent. Having written to the minister for the British overseas development administration about the damming of the Narmada river, I now realise that bureaucracy and government is a waste of manpower and resources and a massive impediment to social equality and justice.

**John Rogerson**  
8 Livingstone Place  
Lockerbie  
Dumfries & Galloway DG11 2AU, UK

### Badgers and Bovine Tuberculosis

I should like to draw your attention to the scandalous waste of public money being spent on a new British government programme to "eradicate" bovine TB through badger culling, which will cost some £50 million over the next five years.

Britain's obligations under EC Directives to eradicate tuberculosis in cattle cost at present nearly £8 million a year on routine cattle testing, a rather cosmetic exercise since there are only some 800 cases a year in Britain of TB in cattle compared to a nearly equal number of BSE cases a week. There is virtually no risk to public health from bovine TB with milk pasteurization almost countrywide and rigorous abattoir inspection.

Ireland is tackling its far greater cattle TB problem (65,000 cases a year) much more realistically by negotiating an £80 million EC grant to bring in more accurate blood tests and computerized tracing of stock, which will shorten herd restriction times while tests are carried out.

I recently resigned from the British government's so-called "Consultative" TB Panel for three main reasons:

— my unwillingness to condone any further waste of money on badger research and culling which is guaranteed not to solve cattle TB. Badger culling in the Southwest of Britain has cost some £11 million and has failed to achieve any

### The 1993 SCHUMACHER LECTURES

Colston Hall, Bristol, 2nd October 1993

## CULTURE

AND

## CREATION

Land, environment and technology

Three influential thinkers at the leading edge of the environmental revolution will speak about the crucial ecological and spiritual values for the twenty-first century

**Jonathan Dimbleby** is a broadcaster for BBC radio and television. He is the President of the Council for the Protection of Rural England.

**Sir Crispin Tickell** is the Warden of Green College, Oxford. He was British Ambassador to the United Nations in New York where he played a major role in the UN Conference on Environment and Development (Earth Summit) at Rio.

**Jerry Mander's** first book *Four Reasons for the Elimination of Television* was a groundbreaking attempt to expose the onslaught of the mass media on cultural values. His latest book *In the Absence of the Sacred* illuminates the way modern technology has destroyed our reverence for nature. He is founder of the Public Media Centre in California.

Lecture tickets £15 each. Lunch tickets £5 each.

For further details, please contact: Bridgit Baker, Schumacher Society, Ford House, Hartland, Bideford, Devon EX39 6EE. Tel: 0237 441621. Fax: 0237 441203.

reduction in cattle TB over 17 years;

— my apparent inability to get the Panel to see that there is a more cost-effective solution to "managing bovine TB", since it is not eradicable *per se*;

— proposed new "Brocktesting" and selective badger culling will be illegal under the 1992 Badgers Act and 1911 Protection of Animals Act because dependent cubs of culled sows will not be followed up, while those of lactating sows will be kept apart for up to three days of tests. This is unnecessarily cruel. Recent five-year data from the Ministry of Agriculture, Fisheries and Food (MAFF) point to 180 sows culled in error, implying that 450 cubs were left to starve.

Recent studies in Northern Ireland indicate a reappraisal of cattle TB epidemiology, aetiology and pathology is necessary as they suggest that "missed" cattle TB carriers are the real problem in bovine TB; at least 0.1 per cent of tuberculosis cattle do not react positively to the skin test used to detect TB. It has not yet been shown how badgers infect cattle in the field since cattle TB is respiratory "consumption", comparable to

TB in humans, associated with overcrowded slums. Thus there is often a "spring flush" of TB in herds after they have overwintered in barns or cattle yards.

By contrast, since all TB cattle may produce infectious cow pats containing bacilli which can live for up to a year, badgers are almost bound to catch TB when foraging for worms or dung beetles under pats after outbreaks of TB in herds. Badgers, in fact, act as a good "miner's canary" indicator of the severity of a herd TB breakdown.

MAFF vets admitted 10 years ago that badgers posed a very low risk to cattle. In 1991 only 160 of 99,338 badgers culled had TB, of which only some 30 would have been infectious. But possibly as few as three or four would have been sick enough to excrete infectious urine which is how cattle are supposed to acquire TB from badgers, even though the vast majority of cattle avoid strong smelling badger excreta for a fortnight or so on pasture, by which time most bacilli would be dead. One vet who left MAFF, disillusioned with the whole TB scheme, said the badger culling scheme was "guaran-

teed to fail", that the Consultative Panel are "political pawns" and that the scheme was "political expediency pursued to the point of absurdity".

But to solve cattle TB, the programme envisages spending £1 million annually on culls, £750,000 on research into the negligible risk of badgers infecting cattle, and allegedly £30,000 on a TB Panel. This is happening while clinical TB research in humans can only muster £10,000 a year, and child vaccination programmes are being cut widely when there is a real risk of TB in urban and ethnic populations still in touch with endemic African/Asian TB areas.

I have requested the Parliamentary Agriculture Select Committee to examine the whole bovine TB strategy as a matter of urgency, before a pointless new "Brocktest" badger culling scheme is launched in total defiance of all rational, economic or pragmatic considerations.

**M. Hancox**

72 Bisley Old Road  
Stroud

Gloucestershire GL5 1NB, UK

## COURSES

### SOUTH BANK BUSINESS SCHOOL

# MSC IN DEVELOPMENT STUDIES

(Full or Part-Time)

Taught by staff with a wide range of expertise in the development of Africa, Asia and Latin America, this innovative and timely degree includes the following units:

- Agrarian Policies
- The State, Human Rights and Development
- Public Policy and Social Welfare
- Images of Development
- Research on a Development topic of your choice.

Units on the degree can be combined with units in European languages and Chinese (Mandarin). Each unit of the MSc can be taken as a short course.

For further details and an application form contact: The Course Director, Dr John Taylor MA, Tel: 071-277 1091, Fax: 071-252 6971, or Richard Naylor, Faculty Office, The Business School, South Bank University, 103 Borough Road, London SE1 0AA.



SOUTH BANK UNIVERSITY  
• LONDON •

University of Edinburgh  
Centre for Continuing Education

## ENVIRONMENTAL STUDIES

5-10 September 1993

Guided excursions and visits in south-east Scotland to investigate environmental problems and some solutions

Brochure: CCE, 11 Buccleuch Place, Edinburgh EH8 9LW  
Tel: 031-650 4400/031-662 0783

### The College of St Mark & St John



SETTING THE AGENDA FOR THE 90s .....

## MA TOURISM AND SOCIAL RESPONSIBILITY

ONE YEAR FULL-TIME PROGRAMME

This course aims to bridge the gap between the conventional agenda of tourism studies and the debates that surround the political, social and economic order as a means to providing a stimulating educational programme for graduates wishing to contribute to the evolution of tourism practice.

Course enquires to: Course Leader, Dr Michael Ireland or Secretary  
Mrs Nicky Davies on Plymouth 0752 761163

All degrees validated by The University of Exeter

# Classified

## DIARY DATES

July 29-August 1, 1993: Uniting **YOGA, HEALTH and ECOLOGY**. 5th International Conference in Bangor, North Wales. For further details, contact Louise Rowan, Conference Coordinator, Life Foundation School of Therapeutics (UK), c/o 15 Holyhead Road, Bangor, North Wales LL57 2EG, UK. Tel: 0248 370076, Fax: 0248 602900.

August 31, 1993: The British Association Meeting is holding an **IMPORTANT DISCUSSION ON TROPICAL RAINFORESTS**. Section E Geography, joint symposium with Biological Sciences, Agriculture and Forestry. For further information, contact: the local secretary, British Association Annual Meeting, University of Keele, Staffs ST5 5BG, UK.

August 31-September 3, 1993: **ADVOCACY FOR POLICIES TO FAVOUR SUSTAINABLE AGRICULTURE NORTH & SOUTH**. Four-day conference in Mülheim, Germany. Coorganized by the European Ecumenical Commission for Overseas Development and the network of sustainable agriculture alliances in Europe. Details: Peter Crossman, EECOD, 174 rue Joseph II, B-1040 Brussels, BELGIUM.

September 7-10, 1993: **HCI '93 — PEOPLE AND COMPUTERS**. Held at Loughborough University of Technology. For copy of programme, contact Dr S.P. Guest, Department of Computer Studies, Loughborough University of Technology, Loughborough LE11 3TU, UK. Tel: 0509 222648, Fax: 0509 211586.

September 13-17, 1993: IWEM Young Members' Study Tour. Lectures and site visits based on the general theme of **RISK MANAGEMENT AND PROTECTION OF THE ENVIRONMENT**. For details, write to: Water and Environmental Management, 15 St John St, London WC1N 2EB, UK. Tel: 071-831 3110, Fax: 071-405 4967.

September 24-29, 1993: The North American Association for Environmental Education is holding a **FILM AND VIDEO FESTIVAL** at Big Sky, Montana. For details, write to: Judy A. Driskill, NAAEE Special Events Chair, c/o TVA, 17 Ridgeway Road/Forestry Building, Norris, Tennessee 37828, USA.

September 29-October 10, 1993: The **EIGHTH INTERNATIONAL EARTH EDUCATION CONFERENCE** at Camp Wanakita, Haliburton, Ontario. This is an opportunity to experience first-hand internationally-acclaimed earth education programmes. Contact: The Institute for Earth Education, Cedar Cove, Greenville, WV 24945, USA. +1 (304) 832 6404.

October 1-3, 1993: **IT'S OUR WORLD TOO**, a conference on local-global approaches to environmental education organized by the Development Education Centre (Birmingham) for teachers, advisers, countryside rangers and others interested in environmental education. Venue: Losehill Hall, Derbyshire. Details from: Ian Clason, Development Education Centre, Gillett Centre, Selly Oak Colleges, Bristol Road, Birmingham B29 6LE, UK. Tel: 021-472 3255.

October 2-3, 1993: **CENTRES FOR CHANGE CONFERENCE** to be held at York, bringing together centres promoting peace, environment, development and justice. For further details, contact: York Peace Centre, 15A Clifford St, York YO1 1RG, UK. Tel: 0904 642493.

October 25-30, 1993: **CITY '93 — Environment and Public Health in Modern Society**, covering urban environment, social issues and health in cities. Held at Antwerp in Belgium. Details from EPH Secretariat, Uitbresidingestraat 506, B-2600 Antwerp, BELGIUM. Tel: +32 (3) 230 9232, Fax: +32 (3) 230 1644.

## COURSES

July 17-September 9, 1993: The Centre for Environmental Management and Planning is holding a course on **Environmental Assessment and Management** at the University of Aberdeen, Scotland. Details of programme from CEMP, Auris Business Centre, 23 St Machar Drive, Old Aberdeen, AB2 1RY, UK.

## CALL FOR PAPERS

Third International Conference on **Separations for Biotechnology**, September 12-15, 1994 at Bulmershe Hall, University of Reading, UK. Submit abstracts by September 15, 1993 to SCI Conference Office, 14/15 Belgrave Square, London SW1X 8PS, UK. Tel: +44 (0)71-235 3681, Fax: +44 (0)71 823 1698.

**International Land Reclamation and Mine Drainage Conference**, April 25-29, 1994 at Pittsburgh, Pennsylvania, USA. Abstracts by August 5, 1993 to D. Lowanse, US Bureau of Mines, PO Box 18070, Pittsburgh, PA 15236, USA. Fax: +1 (412) 892 4067.

## MISCELLANEOUS

The **Nicaragua Solidarity Campaign** is looking for **women volunteers** to work with a women's environmental project in Nicaragua with opportunities to participate in workshops. December 15, 1993 to January 15, 1994. Details from: NSC, 129 Seven Sisters Rd, London N7 7QG, UK. Tel: 071-272 9619.

The **Environment Protection, Vegetarian and Vegan Society in Hong Kong** is concerned with environmental protection, animal rights, anti-vivisection, and is looking to establish contact with similar groups. Please write to: Ng Wai-Yee, GPO Box 11634, HONG KONG.

**Scientists for Global Responsibility**. If you believe that global responsibility has to be taken seriously, write to: Alan Cottey, Unit 3, Down House, The Business Village, Broadhill Road, London SW18 4ZG, UK. Tel: 081-871 5175.

Polish environmentalist looking for **voluntary work in Latin America**, speaks Spanish and English. Please write to M. Doroszkiewicz, St Bryly 3, M. 20 02685, Warsaw, POLAND.

Members wanted for the recently formed **Association for the Study of Literature and Environment**. For more information, write to: Michael Branch, English Dept. University of Virginia, Charlottesville, VA 22903, USA.

### Classified Advertising Rates

Word rate 40p per word, min. 20 words  
Semi-display £6.00 per scdm, min. 3 scdm  
Box No £2.50 extra. All excl. VAT

Send to: **The Ecologist**  
Worthyvale Manor, Camelford  
Cornwall PL32 9TT, UK.

## WEC BOOK SERVICE

### Now available

Roger Moody, *The Gulliver File: Mines, People and Land*. An exhaustive file of information on nearly 4,000 mining companies and subsidiaries operating in over 120 countries. An invaluable reference book. 894pp, hardback, 1992, £28.50.

Lester R. Brown et al, *State of the World. 1993*. The latest Worldwatch Institute Report on progress towards a sustainable society. 268pp, paperback, 1993, £6.50.

Jack Frazier, *The Great American Hemp Industry*. Hemp is a fast-growing plant and sustainable for producing paper, fibre, food and fuel, paperback, 1991, £4.50

Budi Rusindah, *Kampung Diary*. This book offers a glimpse into life in the Kampung community before Independence and the changes in attitude and values since then. 179pp, 1992, £5.

Vandana Shiva, *Biodiversity — A Third World Perspective*. This booklet suggests principles for an approach to the Biodiversity Convention process. 22pp, £2.75. *Biotechnology and the Environment* examines the potential biological and chemical hazards of biotechnology and warns of the export of hazards to the South. 37pp, £3.75.

Bharat Dogra, *Forests, Dams and Survival in Tehri Garhwal*. At a time of dismal news of relentless ecological ruin, sustained and successful resistance is encouraging. 85pp, paperback, 1992, £4.50.

Bharat Dogra, *20th Century Failures and the Challenge of the Last Decade*. A potential opportunity for achievement has been wasted as more people go hungry or die because of civil strife, war and misuse of resources. 215pp, 1992, paperback, £8.

Bharat Dogra, *In the Interest of Interest: Trade, Aid and Debt in an Unequal World*. GATT, the World Bank and the IMF are discussed with reference to pressures on India. 112pp, hardback, 1991, £6.00

Peter Bunyard (ed), *New Responsibilities: The Indigenous Peoples of the Colombian Amazon*. This report provides an insight into new government policies concerning indigenous land rights and conservation. 160pp, with maps, graphs and b&w photos, 1993, £18.00

For postage and packing, please add 15% of the price per book for orders within the UK, 20% for overseas surface mail. Please send your order and payment to Wadebridge Ecological Centre, WEC Book Service, Worthyvale Manor, Camelford, Cornwall PL32 9TT, UK. Tel: 0840 212711, Fax: 0840 212808. Credit card orders accepted.

# HOW YOU CAN HELP THE TSAVO ORPHANS



Photo: Brian Cushing

**T**savo National Park is the home to 9 orphan elephants. These orphans are the result of the ivory trade which has reduced the African elephant population to less than 600,000.

**S**ubsequently, Care for the Wild is asking you to become a foster parent to one or more of these orphans from as little as £14.95 per year. Daphne Sheldrick and her dedicated team will be monitoring the orphan rhinos at her nursery in Nairobi.

**A**s a foster parent you, or a nominee of your choice, will receive an introductory gift pack and an update on your orphans progress after six months of fostering.

**V**ery often these orphans are found bewildered and dehydrated. Some do not have the will to live. Your donation will help to pay for food, medical supplies and attendants to look after them.

**O**ur target is to make this programme so successful that we are able to ensure the future of these orphans, and go on to tackle the wider problems of poaching and elephant conservation world-wide.



Telephone: (0293) 871596 Registered Charity Number: 288802

PLEASE CUT OUT OR PHOTOCOPY THIS COUPON

Yes! Please send me details on becoming a foster parent to an orphan elephant or rhino.

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Postcode \_\_\_\_\_

Send this coupon to:

**Care for the Wild**

Dept. BW8

1 Ashfolds, Horsham Road, Rusper,  
West Sussex, RH12 4QX.

or Tel: (0293) 871596 and quote EC1.