

the Future is NOW

VOL.1

A P R I L 2 0 0 1

For the UN World Summit on Sustainable Development





International Institute for Environment and Development





In 2001, the International Institute for Environment and Development (IIED) marks its 30th anniversary. Thirty years ago, IIED's founder, Barbara Ward and René Dubos published *Only One Earth* that helped to set the agenda at the Stockholm Conference on the Human Environment. For the Rio UN Conference on Environment and Development, IIED published a series of reports as a brief and accessible guide to the key issues.

In preparation for the UN World Summit on Sustainable Development (WSSD) in Johannesburg, in September 2002, IIED is launching a new series, *The Future is Now*, to learn from the past and to inform the future. This title is the first of four in the series. We hope it will give the reader an overview of what was accomplished at Rio and the challenges that remain and must be tackled at Johannesburg.

ACKNOWLEDGEMENTS

This report was compiled by Tom Bigg, IIED's World Summit on Sustainable Development Coordinator. Contributors include: Tariq Banuri, Steve Bass, Tom Bigg, Josh Bishop, Nigel Cross, Barry Dalal-Clayton, Vivian Davies, Caroline Digby, Gabriela Flores, Tom Fox, Maryanne Grieg-Gran, Saleemul Huq, Izabella Koziell, James Mayers, Gordon McGranahan, Michel Pimbert, Nick Robins, Dilys Roe, David Satterthwaite, Krystyna Swiderska, Cecilia Tacoli, John Thompson, Camilla Toulmin and Bill Vorley. It was edited by Lilian Chatterjee.

We gratefully acknowledge the following for their contribution to this series: Danida (Royal Danish Ministry of Foreign Affairs), Environment Canada and the Swedish International Development Co-operation Agency (Sida).

ABOUT IIED

The International Institute for Environment and Development (IIED) is an independent, non-profit research institute working in the field of sustainable development.

IIED aims to provide expertise and leadership in researching and achieving sustainable development at local, national, regional and global levels. In alliance with others we seek to help shape a future that ends global poverty and delivers and sustains efficient and equitable management of the world's natural resources.

For additional copies of this volume, or future volumes of this series, please contact SMI Distribution Services Ltd. (*details on back inside cover page*).

CONTENTS



{ 1 }	FROM RIO TO JOHANNESBURG	2
	Opening up the Summit Process The UNCED Agreements Getting to Grips with Globalisation Financing for Development	
{ 2 }	IT'S ALL ABOUT POWER	9
	A Divided Economy in the World A Dual Economy in the South	
{ 3 }	THE CHALLENGE FOR JOHANNESBURG	14
	ls Sustainable Development Still Relevant? Can Globalisation Become Sustainable?	
{ 4 }	RIO'S LEGACY	23
	Local Agenda 21s Sustainable trade Corporate responsibility Urban development Climate Energy Soils Water Forests Biodiversity Biotechnology Farms and Agriculture Mining Tourism	
	CONCLUSION	42
	WSSD WEBSITES	43
	THE FUTURE IS NOW • vol.1	iied 1

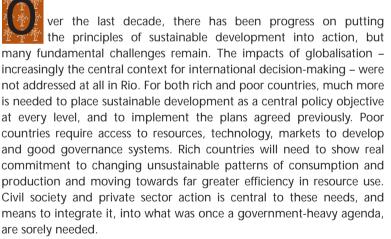
FROM RIO TO JOHANNESBURG



1

Our biggest challenge in this new century is to take an idea that seems abstract – sustainable development – and turn it into a daily reality for all the world's people.

> UN SECRETARY GENERAL KOFI ANNAN



This is a challenge for society as a whole, but governments must create the climate in which real change is possible. The UN is convening a World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa, September 2002. The Johannesburg Summit offers a major opportunity to develop understanding of these issues, and have a mature debate on practical ways to achieve progress.



OPENING UP THE SUMMIT PROCESS

The Summit could usefully reinvigorate Rio's central message on the importance of integrated decision-making to achieve sustainable development. This means understanding the real strengths and weaknesses of the multi-stakeholder processes such as strategies for sustainable development and Local Agenda 21s launched at Rio – and critically working out how these processes can effectively influence core economic decision-making and development planning exercises of national governments and decentralised authorities.

The WSSD should urge the international private sector to recognise the International Development Target which requires all countries to have a strategy for sustainable development by 2002. Business can help to ensure that future investments support strategies and policies for sustainable development elaborated by developing countries rather than undermining them.

While recent global summits have credited some of their success to involving non-governmental organisations (NGOs), civil society and business, few routines are in place to do this in equitable, accountable and credible ways. The Aarhus Convention, agreed by the UN Economic Commission for Europe in 1998, presents useful principles that are not well applied at international level. It grants the public rights and imposes on parties and public authorities obligations regarding access to information and public participation and access to justice. Both the design and the agenda of the WSSD really need to get to grips with the strong consensus that sustainable development can only be debated, planned and implemented through the engagement of civil society, business and government. Without this, there has tended to be too much preoccupation with 'wordsmithing' texts, and too little in developing strong policy directions and ideas for implementation.

GETTING TO GRIPS WITH GLOBALISATION

Globalisation provides a new context for the 2002 event. The UN Commission on Sustainable Development (CSD) process during the 1990s was often rendered irrelevant by the seismic economic, political and technological shifts underway beyond the conference hall. This also creates a different political climate whereas most were willing to suspend belief at Rio and back a warm consensus for sustainable development, this is unlikely in 2002; and the likelihood of substantial public protests on perceived governmental weakness should not be discounted, nor the likelihood of the media focusing on failure and activist dissent.

The stalling of a World Trade Organisation (WTO) Round and the launch of new initiatives targeted at the corporate sector, such as the UN Global



Compact Initiative, which promotes good practices by corporations based on universal principles, offers an opportunity for some hard and honest thinking, particularly about the relations between processes of globalisation and parallel movements for decentralisation across the developing world. It is in the dynamic interaction between these two trends – especially in governance and business patterns – that much of the most potent innovation is occurring.

FINANCING FOR DEVELOPMENT

There is a crisis in development finance. Steady erosion in official development assistance (ODA) and declining effectiveness and legitimacy of domestic revenueraising efforts have sharply reduced support for programmes of capacity building, poverty eradication, and environmental conservation. While nonconcessional financial flows - commercial credit and direct investment - are growing, their focus is on large-scale industry and projects, infrastructure which are inadequate vehicles for the pursuit of sustainable development. The small and medium-scale sectors, which hold the potential to create large numbers of sustainable livelihoods, are generally not reached by this large and growing segment of development finance.

In a number of the wealthiest countries, ODA has sunk to 50-year low levels, coinciding with states' shifting

priorities, shrinking autonomy and increased obligations to emerging crises changes that suggest to many that the era of aid as a force in development is nearing its end. Similarly, domestic tax collection, which has historically yielded funds for poverty and development programmes, is in crisis in many developing countries. Commercial creditors typically find small-scale development finance too costly a resource to provide. Finally, while the shining example of micro-credit provides grounds for optimism, it has worked effectively in only a handful of countries and caters only to a small (though significant) niche.

The UN Financing for Development (FfD) conference is intended to address these issues. In collaboration with the World Bank, International Monetary Fund and WTO, it will be held in Mexico in early 2002. It will treat all aspects of financing for development as a coherent and integrated whole, addressing: domestic financial resources; international resources: foreign direct investment and private flows; international trade; international financial cooperation; external debt; and systemic issues.

FfD has two main strengths: it places poverty reduction at the centre of its agenda and it recognises the importance of the private sector as a source of finance for development. However, it has yet to address the challenge of sustainable development and the interactions between poverty, environment and development,

浙

in spite of the stated intention to adopt an integrated approach.

Underlying the FfD agenda is the priority to mobilise funds. The assumption is that mobilising financial resources is what is needed to meet development objectives and in particular to address poverty reduction. An alternative view is that putting money into development is futile without addressing the basis of mainstream financial decision-making. While the private sector can be a source of funds for development, it is all too often associated with unsustainable activities. Many financial decisions are made without sufficient attention to their environmental and social implications or their impact on poverty. This applies particularly to foreign direct investment. But it is not just private sector financial institutions that could do more to mainstream sustainable development into their business. There have been some much criticised cases of incoherence between the financing decisions of public sector-backed export credit agencies (ECAs) and the development policy goals and activities of their respective governments. The environmental and social impacts of large infrastructure projects, dams, power stations and mining projects supported by the ECAs, and in some cases development finance institutions, have aroused concern, both locally and internationally.

While aid for development is laden with difficulties – inefficiency, ineffectiveness,

corruption, misuse - the professional consensus is that aid within a supportive and international policy domestic framework, is the best - indeed, the only - method of enabling certain types of development essential activity. Heightened capacity and strong institutions are widely recognised as the cornerstones of poverty alleviation and sustainable development. These are objectives which commercial finance has no clear and immediate incentive to pursue. With the precipitous drop in this form of finance, progress toward sustainable development is indeed in question.

As the Summit approaches, these trends reflect poorly on the global commitment to the goals of Agenda 21. A renewed commitment would involve a three-pronged international agenda:

- Reversal of the trajectory of declining sources of finance.
- Creation of an institutional framework that will enable and encourage private, non-concessional finance to reach small and medium scale enterprises.
- Strengthening the capacity of small and medium-scale borrowers to access and deploy resources effectively.

In its response to the questions of future development finance, the international community should encourage these alternatives, and to place the development of this type of framework and the capacity of participant groups, at the centre of its strategy.





THE UNCED AGREEMENTS

UN CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED) AGREEMENTS

The Framework Convention on Climate Change establishes that climate change is a serious problem; that action cannot wait upon the resolution of remaining scientific uncertainties; that developed countries should take the lead; and that they should compensate developing countries for additional costs incurred in taking measures under the Convention. The Kyoto Protocol, agreed by Parties to the Convention in 1997, sets specific commitments for limiting greenhouse gas emissions by the industrialised countries listed in Annex I of the Convention. It also describes a range of mechanisms that offer flexibility in the implementation of these commitments, and special provisions relating to developing countries.

The Convention on Biological Diversity aims to preserve the biological diversity of the planet through the protection of species and ecosystems, and to establish terms for the associated uses of biological resources and technology. It affirms that states have 'sovereign rights' over biological resources, the fruits of which should be shared in a 'fair and equitable' way on 'mutually agreed terms'. More recently, governments negotiated a subsidiary agreement to the Convention to address the potential risks posed by cross-border trade and accidental releases of living modified organisms (LMOs). Adopted in January 2000, the Cartagena Protocol on Biosafety allows governments to signal whether or not they are willing to accept imports of agricultural commodities that include LMOs by communicating their decision to the world community via a Biosafety Clearing House, a mechanism set up to facilitate the exchange of information on and experience with LMOs. In addition, exported commodities that may contain LMOs are to be clearly labelled.

{1} FROM RIO TO JOHANNESBURG



- The UN Convention to Combat Desertification, agreed in 1994, acknowledges that the struggle to protect drylands will be a long one with no quick fix. The causes of desertification are many and complex, ranging from international trade patterns to the unsustainable land management practices of local communities. One of the fundamental problems associated with the CCD concerns the unbalanced pattern of interests between the different parties. The Convention paid particular attention to the need for a participatory approach, bringing in NGOs from the South into the negotiation process. Although dryland degradation may be widespread throughout the world, it has failed to attract the kind of international support promised for tropical forests. This lack of interest translates into a lack of funds and, consequently, the Convention has been given low priority by both affected and donor countries.
- Agenda 21 outlines an 'action plan' for sustainable development, covering a wide range of specific natural resources and the role of different groups, as well as issues of social and economic development and implementation. Agenda 21 seeks to combine two strands of development action: one which focuses attention on improving the access of the poor to the resources they need for survival and development; and one which concentrates on management of these resources. These two strands need to be better linked to ensure that anti-poverty programmes include an element of natural resource management, and resource for the poor. Agenda 21's influence since UNCED is difficult to quantify, but it remains the most authoritative (and probably the most convoluted) guide to sustainable development.

Two main shortcomings have become clear since Agenda 21's inception: first, its recommendations and sources of funding have not been adequately considered; second, there is no attempt to set priorities – everything seems equally important. Despite these reservations, it should be seen as a valuable first step in a process to refine international co-operation towards a more sustainable world.





The Rio Declaration comprises 27 principles for guiding action on environment and development. Many address development concerns, stressing the right to, and need for, development and poverty alleviation; others concern the rights and roles of social groups. Principles concerning trade and environment are ambiguous. The Rio Declaration has been invoked in national law in various contexts, and principle 10 provided a basis for subsequent negotiation of the Aarhus Convention on access to environmental information.

The non-legally-binding **Forest Principles** represent the remains of the first wave of blocked attempts to negotiate a convention on forests. They emphasise the sovereign right of countries to exploit forest resources along with various general principles of forest protection and management. A succession of inter-governmental fora under the Commission on Sustainable Development has formulated proposals for action, but the process has been tortuous. A UN Forum on Forests has been created which will facilitate implementation of agreed proposals for action, and ultimately will consider the need for an international legal regime.

The UN Commission on Sustainable Development was established to play a central and catalytic role in promoting implementation of Agenda 21. Its annual work programme has focused on elements of Agenda 21 and, more recently, on issues such as tourism, energy and transport which were not specifically addressed at UNCED. It has been criticised as an ineffective 'talkshop', and (particularly in its first four years) for deliberating on issues dealt with in more detail in other fora. At the UN Rio +5 Conference in 1997, a new work programme for the CSD was agreed which addressed some of these criticisms, but its lack of influence in global politics remains a widespread concern. However, the CSD has initiated some useful discussions on elements of sustainability, and its lack of decision-making capacity can be understood as allowing more open dialogue and greater flexibility in involving civil society organisations.

nec

IT'S ALL ABOUT POWER



{**2**}

The real debate associated with globalisation is, ultimately, not about the efficiency of markets, nor about the importance of modern technology. The debate, rather, is about inequality of power.

> NOBEL LAUREATE AMARTYA SEN

he Agreements reached, or initiated, at the United Nations Conference on Environment and Development (UNCED) provide an internationally endorsed framework for understanding and implementing sustainable development. However, significant economic and societal changes have fundamentally altered the context for these treaties and processes, with varying degrees of compatibility. In particular, the diverse and complex impacts of globalisation present new organisational and ideological questions.

The World Trade Organisation (WTO), the World Bank and the International Monetary Fund are increasingly attempting to address environmental protection and poverty alleviation. Multinational corporations and global civil society alliances are pursuing ever more vigorous debate. The Johannesburg Summit can engage these actors and focus on ways in which globalisation can be harnessed to meet the needs of the poor and marginalised to sustain environmental services.



A DIVIDED ECONOMY IN THE WORLD

The world's richest people more than doubled their net worth between 1995 and 1999: their combined wealth now equals the total annual income of the world's poorest 2.5 billion people. Similar inequalities are observed lower down the scale. In Indonesia, 62% of the stock market value is held by the nation's richest 15 families; in the Philippines it is 55% and 53% in Malaysia. This accelerating inequality is a by-product of a free market, capitalist economy. These gaps are going to grow – a recent WTO estimate suggests that income disparity will double in a century and a half at the current trend.

Many argue that without widespread land reform, there can be no sustainable development of extensive public provision of social services and redistributive income policies. However, there is no doubt that a number of countries, notably in East Asia, have managed to lift themselves out of both poverty and inequality in a relatively short space of time, with export success being a critical ingredient. The inequality, instability and ecological unsustainability of the current pattern of corporate globalisation are now under increasing assault, both intellectually and politically. Six major fault lines can be observed:

Ignoring Equity: Market opening creates winners and losers – indeed, its purpose is to reallocate assets and livelihoods towards those most able to compete. Even the WTO admits that "poverty may exacerbated be temporarily". But liberalisation has denerally been pushed through without mechanisms in place to compensate the losers with some of the increased net wealth that market opening is supposed to bring. It is therefore entirely rational for those whose livelihoods are threatened by freer trade to oppose liberalisation.

- Pulling up the Ladder: What worries a growing number of developing country governments though not apparently the government development agencies of the North is that many of the policy instruments used to achieve development in East Asia and elsewhere are now viewed as inconsistent with the rules of the WTO: seeing the emergent competition from the South, the industrialised world is pulling up the ladder of development. In this context perceived attempts to incorporate social and environmental clauses in trade agreements are seen as ways to stop the South prospering rather than as measures to achieve balanced and sustainable development.
- Speaking with Forked Tongue: The commitment of the North and the dominant international institutions to free market policies is, of course, only partial. It is severely constrained in practice by the \$700 billion worth of barriers to Southern exports, notably agriculture and textiles. With minor

{2} IT'S ALL ABOUT POWER

exceptions, the North cannot agree to give tariff-free access to the least developed countries – and their latest proposals were described by Bangladesh as "confidence shattering". But while these privileges of the rich remain nonnegotiable, the South is forced increasingly to open their economies subsidised goods, destroying to markets for local producers. Quite understandably, developing countries have been opposed to a new round of negotiations at the WTO until the impacts of the Uruguay Round have been fully assessed and the agenda for the next is weighted in their favour.

Removing the Foundations: Enabling the South to have more discretion in its development trajectory and removing barriers to market access would, however, fail to address the ecological costs of corporate globalisation - in fact, it could further erode the natural foundations for development. Though multinational corporations can often be cleaner and more efficient than local producers in the South, the resource intensive patterns of production and consumption that they embody are becoming further diffused and entrenched through globalisation. Ten years after the Earth Summit, little has been done by the North to 'put its house in order' - and hence little has altered in the predominant trajectory of development currently stimulated by trade and investment deregulation.

One of the critical dilemmas for the South is how to generate wealth without becoming locked into the ecologically obsolete technologies such as fossil fuel combustion dominant in the North While evidence is growing that radical reductions in pollution and resource use in the postindustrial economies of the North are necessary, possible and viable, the changes in lifestyles, regulation and corporate strategy required to achieve these are still resisted. Equally taboo are discussions of measures to address the North's massive 'ecological debt' to the developing world (for example, the costs of climate change borne by the poor).

Building up Goliath: Corporate globalisation has brought a massive shift in the balance of power from the state to the firm over the last 30 years, notably multinational corporations, who dominate international trade and investment. The retreat of the state from productive activities through privatisation and deregulation has certainly brought notable efficiency benefits. But it has rarely been accompanied by parallel measures to hold companies to account and match company size to that which is compatible with democratic governance in the global economy. This limits the developing capacity of country governments to negotiate with multinational investors and retain value



through tax: Oxfam UK estimates that developing countries are losing \$100 billion a year through corporate tax evasion. Furthermore, deregulated international commerce is creating a buyer's market, exposing producers to concentrated purchasing power, forcing down returns. Finally, the redefinition of property rights and privileges contained in global agreements, such as the WTO, serves further to bias the economy against the South and poor communities (notably trade related agreements on intellectual property -TRIPs). Just as the first era of globalisation was shot through with conflicts over ownership of factories, so the second age is being marked by new struggles over the Earth's declining carrying capacity. Solutions to both climate change and biodiversity loss thus both turn on a redistribution of property rights.

It's Power Stupid! Globalisation is clearly not a simple question of economics. Not only does the theoretical basis for a global free market economy appear increasingly shaky but it is also undesirable since equity and ecology do not hold currency in the capitalist economy. It is telling that even Singapore Prime Minister Chok Tong Goh – the leader of one of the Southern 'stars' in the new global economy – felt forced to attack this fundamental imbalance at the recent UN Conference on Trade and Development (UNCTAD) Summit: "Globalisation is undoubtedly led from the West and bears the strong imprint of American political and economic power. It is highly uneven in its consequences. Globalisation should not mean the dominance of the West over the rest."

What is fascinating and hopeful about the current situation - especially following the collapse of the Multilateral Agreement on Investment (MAI) and the debacle at Seattle - is the degree to which the political and corporate establishment feel the need to make nods in the direction of poverty reduction, sustainability and greater accountability. Thus, the world is awash with 'soft' policy efforts, notably the OECD's Guidelines for Multinational Enterprises and the UN Secretary-General's Global Compact. Seen in light of previous efforts to redirect the global economy, such as the New International Economic Order in the 1970s, these look pale and ineffective. But they nevertheless present important tactical opportunities for change, particularly given the new element that was not present 20 years ago: internationally-organised civil society. This gives hope that not only can such initiatives deliver direct benefits, but that they can also prefigure a new generation of international regulation that turns corporate globalisation to the common good.



A DUAL ECONOMY IN THE SOUTH

The sustained promotion of free market policies – trade and investment liberalisation, privatisation of state assets, increased labour flexibility – is simultaneously integrating and excluding communities and countries across the globe. As a result, a dual economy is emerging in the South. The 'New South' is outward-looking, with the capacity to exploit global markets and benefit from a significant upgrading in social and environmental performance through productivity improvements.

Examples of this 'New South' can be found in many places and sectors. Bangalore with its silicon economy is the place most associated in the popular consciousness as the archetype of the 'New South'. But it also highlights the ways in which the more locally-based, livelihood economy is being disrupted by corporate globalisation. Globalisation has the tendency to marginalise systematically the livelihood economy, by diverting the asset base of the poor towards corporate interests. The corporate economy in Bangalore has won privileged access to government funding, land, infrastructure and services, disrupting the local economy which provides most of the population including virtually all poor groups - with their livelihoods: "poor groups suffer demolition, resettlement, increased land prices and a governance system in which their local representative structure has little power". The Bangalore case highlights how the promotion of corporate globalisation is an active choice of politicians – operating not only in international organisations or national authorities, but also at the state and city level.

It is possible to show beneficiaries of globalisation in the South but they remain outnumbered by those excluded or actively impoverished by market opening. Furthermore, the capitalintensive nature of the corporate economy means that it is unlikely that it can respond to the huge 'livelihood famine' across the South. The cost of creating one job in the modern industrial sector in India is now well over \$100,000. The creation of the 15 million jobs needed each year would by itself cost eight times the GNP of the country. Even in a utopian world of 'nice globalisation' with every international bias against the South removed, every tariff and market distorting concentration of corporate power excised, it is doubtful whether the world's goals for poverty reduction and sustainable development could be achieved. Additional measures are clearly required: redistribution from North to South through debt cancellation, automatic transfers (not aid) and payments for environmental services. But strengthening the local economy, its livelihoods and its asset base is also essential - yet much neglected by current policymaking.



{3}

At Johannesburg, the world consensus on the real and practical meaning of sustainable development must take a quantum leap. Shall we dare to ask the question - how sustainable is a world which promotes the strident and unabated leaps of development of some parts of the world, and which perpetuates, and even exacerbates, the underdevelopment and accompany poverty and disease in other parts of the world?

> ENVIRONMENT MINISTER MOHAMMED VALLI MOOSA, SOUTH AFRICA



Sustainable Development Still Relevant? In many respects, sustainable development has failed to become the universally recognised moral imperative envisaged a decade ago. On the contrary, it is poorly understood and characterised as an environmental issue with little resonance with the broader public. It is ironic that, while the political and ideological choices inherent in the international trading system have become part of mainstream debate, the only set of values to provide a framework for understanding and harnessing these forces remains marginalised.

Sustainable development is about reconciling 'development' (the meeting of human needs) with limited natural resources. If development implies ever-increasing resource use (and the generation of wastes), eventually it must conflict with finite resources and finite capacities to absorb or break down wastes. So the concept of sustainable development makes us think about the environmental implications of any human activity or product, both where it takes place and elsewhere. The box opposite outlines the multiple goals of sustainable development.





MEETING THE NEEDS OF THE PRESENT...

► Economic needs ► Environmental needs

► Social, cultural and health needs ► Political needs

...WITHOUT COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR OWN NEEDS

► Minimising the use or waste of non-renewable resources ► Sustainable use of finite renewable resources ► Not overtaxing the capacity of ecosystems to absorb or break-down wastes ► Protecting natural processes and climatic systems, including not overtaxing the finite capacity of global systems to absorb or dilute wastes without adverse effects ► Political and institutional structures within nations and internationally which support the achievement of the above

CAN GLOBALISATION BECOME SUSTAINABLE?

Like sustainable development, globalisation means different things to different people. Conspicuous by its absence from the documents agreed at the Rio Summit, it has emerged as the motor of the age, whose beneficiaries and ultimate direction are all deeply contested: indeed, the question of how to 'manage', 'steer' or 'replace' globalisation is now the central political issue.

If sustainable development has gained vocal support to comparatively little effect, globalisation has had major effects with comparatively little support. This is not surprising: the term globalisation was coined to describe what is happening in the world, not what ought to happen. At times it is treated as synonymous with international economic liberalisation and the fall of communism. At other times it is treated as an environmental or cultural phenomenon.

In its environmental dimension, globalisation refers to the increasingly interconnected nature of environmental problems. With global warming, for example, greenhouse gas emissions from around the world combine to alter the global climate. Behind this highly publicised example, a wide range of global environmental threats are emerging: stratospheric ozone depletion, the dispersion of persistent organic pollutants (POPs), loss of biodiversity, emerging viruses, and so on. All of these problems involve the interplay of global processes, with causes and consequences, in different continents.



Economic globalisation refers to the increasingly interconnected nature of the world economy. An increasing share of production is traded internationally. International financial exchanges, with the help of new information technology, are arowina ever more rapidly. Corporations are increasingly transnational in character. Economic activities are becoming functionally more integrated: a single product is increasingly likely to contain both labour and material inputs from many countries. With capital and products flowing ever more easily, labour faces more international competition and, unlike corporations, unions have not been able to adapt successfully to globalisation. Nation states have less scope for economic management. While a world-scale economy has existed for centuries (eq. imperialism), it is at very least taking on a new form. And while the major shifts in economic flows have occurred between the more affluent countries, even the poorest states have been affected.

Social globalisation refers to an increasingly transnational character of social processes and networks. With the help of new information technologies, ideas can be communicated rapidly around the world. Corporations and the international media have been particularly quick to take advantage of this, evidenced by expanding consumerism. But political processes, social movements and even personal networks are also

adapting. From a sociological perspective, globalisation can also refer to people's increasing consciousness of the world as a whole. Some sociologists see this as part of a shift towards a more 'reflexive modernisation', that questions traditional views of science, progress and development, and undermines political categories such as "left" and "right". While many of these shifts are more evident in affluent countries, they are globally significant.

These different dimensions of globalisation are closely interrelated. Together, they not only bring new challenges and opportunities but transform old ones. Globalisation has reduced the influence of national governments, but places new demands on governance at every level.

There are many examples of ways in which the private sector can be understood to have played a positive role in stimulating economic growth in poor countries - providing both financial benefits through the generation of jobs and increased foreign trade, and technological innovations - which improve the quality of life for some. Links with multinational companies and advances in the capacity of domestic producers to compete internationally represent the principal means by which Southern countries are currently able to access global markets and increase their gross national product.

Yet the uneven effects of economic liberalisation have resulted in growing income disparity, both between and



浙

within countries, which is increasingly unsustainable. The challenge is to turn the process of globalisation in favour of the the environment and the poor in the South. At the same time, it is important to recognise that globalisation will never be a solution for many of the poor in the South. As a result, new ways need to be found to build up the thriving livelihood economies that enable the poor to overcome local oppression and resource constraints and take back control from multinational corporations where necessary.

ARE POVERTY ERADICATION AND SUSTAINABLE DEVELOPMENT COMPATIBLE?

Most governments and international agencies define and measure poverty by income levels or consumption levels. Three limitations in this approach are now widely recognised:

- The lack of attention to the assets on which most poor people rely for their livelihoods, including access to resources (natural and financial), good health and capacity to work.
- The extent to which income-based poverty lines fail to capture many critical aspects of deprivation including the health burden linked to very poor housing and lack of basic services and powerlessness (seen in the contravention of poorer groups' civil, political and resource using rights).

The lack of attention to the social relations that so often underpin poverty (or processes of impoverishment) – for instance a lack of political influence, insecure or uncertain tenure of resources and being the object of discrimination. These often underpin poverty because they limit people's access to income-earning opportunities, services and resources and the fulfilment of their civil, political and resource-use rights.

This led to the concept of 'sustainable livelihoods' - entailing the capabilities, assets (including both material and social resources) and labour required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the resource base. This highlights the extent to which poverty reduction must ensure that poor farmers, pastoralists and those depending on forests and fisheries have access to the natural resource base that permits sustainable livelihoods. This implies the need to address inequitable patterns of ownership or use rights.

New perspectives on poverty also give more attention to the health risks to which low-income groups are exposed and their direct (health) and less direct (economic and social) implications for creating, perpetuating or deepening poverty. This



includes more attention to basic services safe and sufficient water supplies, adequate provision for sanitation and health care. These can be both expenditure reducing (less time off work from illness or injury, less expenditure on health care, less physical effort) and income enhancing (as housing can be used for income-earning activities and forms the household's most valuable asset).

With regard to poverty and to environmental change, four conceptual shifts are of particular relevance:

- From general trends in natural resource degradation to more location-specific diverse, differentiated and dynamic understandings of environmental change. New conceptions of environmental degradation recognise the ability of local groups to lessen environmental impacts and place such degradation in context with other problems faced by poor local people.
- From the availability of natural resources (soils, forests, water) to what influences people's access to and control and management of them. Markets and legislation have critical roles in shaping people's access; so too do institutions (both formal and informal) which also serve as arbitrators in contested resource claims.

- From inadequate income or consumption to a lack of assets, rights, and access to resources and services in conceptions of poverty and many other aspects of deprivation - including health burdens. This implies a shift from addressing poverty to addressing the processes that contribute to impoverishment, with location-specific understandings. It suggests the need to change institutional structures and power relations also influenced by age, gender and class.
- From an assumption that poverty causes environmental degradation to a recognition that most environmental degradation arises from the consumption patterns of middle and upper income groups and the production systems that meet (and stimulate) their demands. Poverty is strongly associated with high levels of environmental health (notably insecure, unsafe risks housing lacking provision for water, sanitation and drainage) but is rarely a major contributor to environmental degradation.

WHAT SYSTEMS AND STRUCTURES CAN HELP DELIVER CHANGE?

During the 1990s, most governmental, intergovernmental and private development assistance agencies recognised the need to support 'good governance' since aid effectiveness depends on accountable and effective local partners. These partners include not only the political and administrative institutions of governments but also citizens and civil society organisations - and new models of governance bring them together with a new, negotiated set of rights and responsibilities. 'Good governance' is needed not only at national and provincial level but also within each district municipality. and 'Good governance' is obviously central to achieving environmental management, economic and social development that is more equitable and more ecologically sustainable, and political structures that are more responsive and accountable. Such changes involve:

- ensuring the upholding of civil, political and resource use rights for everyone, especially for low income groups;
- ensuring that low income groups have assured access to natural resources, the skills to improve their long term productivity, and the markets and prices which provide a strong incentive for conservationbased management;

- ensuring that the environmental health burden associated with poverty is addressed;
- facilitating informed dialogue and agreement among stakeholders;
- ensuring that those who take decisions are directly accountable to the people affected by them;
- tackling governmental corruption, which further disadvantages the poor and undermines democratic institutions.

Political and institutional capacity needs to improve in more than just the technical aspect which has preoccupied much development assistance. It includes the abilities to develop and agree the 'rules of the game'; identify and engage with stakeholders; prioritise key issues; communicate and develop commitment to agreed responses; co-ordinate with institutions 'vertically' and 'horizontally'; learn and adapt and ensure transparency and accountability.

A major challenge arises with the multitude of institutions which have a stake in environmental management and its outcomes.

Informal institutions: Many institutions involved in the 'front line' of sustainable development are non-formal: for instance, those controlling access to land and water amongst pastoralists involve rules and sanctions – and indeed institutional memberships – which are rarely codified,



and go unrecognised by the 'higher' formal institutions. Uniting effective formal and informal institutions is a key challenge because many local environmental impacts cumulate at the regional level and varied national policies have an impact locally.

Organised civil society institutions. At a higher level, NGOs and some community-based institutions are more visible and may have legal recognition. Some are not truly representative, and become as resented as government institutions in their failure to work in participatory ways. Nevertheless, many bona fide organisations are representative of the poorer sections of society including community-based membership organisations that have democratic and accountable structures and local NGOs that have developed more participatory models of working with low-income groups.

Governmental institutions. Four trends – privatisation, decentralisation, partnerships, and co-ordination – have characterised much governmental institutional change in recent years, in response to fiscal and other pressures to improve the efficiency and transparency of government. The challenge is to reform – and not merely to cut back – the state's role in an increasingly complex institutional environment.

Decentralisation can improve 'responsiveness' to local-level 'good governance' or it can merely increase the penetration of governmental influence. Much depends on the actual capacity at local level and accountability to local populations to work with local stakeholders to plan, implement and monitor actions. In urban areas, much of the innovation in Local Agenda 21s (the call for local participatory initiatives from the Rio Summit) has taken place in countries in which the power and the democratic nature of local governments have been increased.

Many of the positive signs involve new partnerships between governments and other stakeholders. Governments are now less likely to claim all responsibility for sustainable development, and citizens and NGOs are more likely to take an active role to share both responsibilities and benefits.

An emerging challenge is how to develop policies and practices that recognise the need for a twin track approach. The first track is clearly to turn the process of globalisation in favour of the poor and the environment in the South - for example, by ensuring greater returns for Southern exporters who produce sustainable products, or by developing markets for environmental goods and services. But the second is to recognise that globalisation will never be a solution for many of the poor in the South - and indeed is currently succeeding by disrupting the local economies on which the poor subsist. As a result, new ways need to be found of building up the thriving livelihood





economies that enable the poor to overcome local oppression and resource constraints, and regain control from multinational corporations were necessary.

NEW APPROACHES TO POLICY COHERENCE

Partnerships can be especially influential if staff of different institutions are trained together and work together in the field, especially on 'new' types of projects focused on environmental management and/or poverty alleviation.

The trend towards improving coordination is, thus far, more apparent in rhetoric than reality. Coherence has been attempted – but rarely achieved in full – through various models:

- Rationalist technocratic 'planning' approaches, such as National Environmental Action Plans. These have rarely included either full analyses of the cross-sectoral and 'vertical' links, or analysis of related institutional capabilities. However, they have improved patterns for vertical and horizontal communication.
- Environment ministries have used development control tools such as Environmental Impact Assessment – but their impacts have been constrained.

Multi-stakeholder fora and round tabling approaches. The best of these have improved communications and the development of shared vision. They have changed policies incrementally, through the actions of their members exerting influence within their own institutions.

Nevertheless, institutional coherence *per se* is not a sufficient criterion for sustainable development if 'bad' policies and procedures remain. Many governments retain historically anomalous environmental policies, reflecting the needs of only a few stakeholders.

At UNCED, governments undertook to adopt national strategies for sustainable development; a target of 2002 for their introduction was agreed at the Rio +5 UN General Assembly Special Session in 1997. But what form should such strategies take to improve governance and assist the transition to sustainable development?

Early strategies had some positive effects, but were very often instigated by an external agency, and driven by financial conditionality. In order to address this, the OECD Development Assistance Committee (DAC) initiated a series of multi-stakeholder reviews and dialogues in Bolivia, Burkina Faso, Ghana, Namibia, Nepal, Pakistan, Tanzania and Thailand. These have led to production of policy guidance for country-level strategies for sustainable development. This offers a set of principles



for national strategies. These emphasise local concepts and norms of sustainable development, local ownership and direction of the strategy process, appropriate participation from all levels, high-level commitment, and mechanisms that work well locally. Thus a strategy for sustainable development should now be able to bring together the aspirations and capabilities of government, civil society and the private sector to create a vision for the future, and to work tactically and progressively through the challenges.

Sustainable development represents an organising principle which aims to bring coherence to different institutional processes and policy interests. Its overarching claim to legitimacy rests on the balance and the trade-offs between economic, environmental and social factors which sustainable development signifies, in pursuit of equity, transparency and accountability.

The effects of this holistic approach are already evident in numerous examples – Local Agenda 21s and an emerging body of work on national strategies for sustainable development present a diverse range of success stories. But many also illustrate the limitations of attempts to implement sustainable development at one level while broader systemic factors remain unchanged. The global regimes of trade, finance and investment are still organised by an entirely different set of imperatives and principles. A crucial challenge for the Johannesburg Summit is to present sustainable development as a set of choices which are relevant for everyone, a set of principles which can guide future action, and a set of practical and popular policies.



RIO'S LEGACY



{4}

Of course [the Johannesburg Summit] is about the environment: the issues of climate change, sustainable industrial growth, preservation of forests, fishing stocks and a range of other familiar issues. But it is not just about the environment. It is about sustainable development as a whole. It is about the reduction of poverty, relief from debt, widening educational opportunity, tackling disease and linking these goals to those of conserving the natural resources upon which the poorest depend for clean water, food, fresh air and their living.

UK PRIME MINISTER TONY BLAIR

n its 1987 report, *Our Common Future*, the World Commission on Environment and Development set out the nature and scale of environmental, social and economic problems to be confronted. It placed the concept of sustainable development at the heart of its proposals for action to tackle pressing issues such as climate change, poverty, deforestation, and economic inequality between countries. Its powerful criticism of prevailing policies and practices, and the institutions that supported them, was broadly accepted by official audiences – it seemed that the idea of sustainable development had arrived. The UN approved it, its agencies adopted it, and many governments set up commissions or committees charged with assessing how their policies should conform to it.

In 1992, the UN Conference on Environment and Development (UNCED) provided further global evidence of commitment. Over 100 Heads of State and Government attended the Rio Summit, while global conventions were signed and a 'sustainable development blueprint' (Agenda 21) was endorsed.

In this chapter, we briefly encapsulate some key IIED issues that were either influenced by the Rio Summit or will be on the agenda of the Johannesburg Summit.

LOCAL AGENDA 21s

One of the most significant innovations addressing urban environmental in problems since the Rio Conference in 1992 has been the emergence of a new kind of initiative - the Local Agenda 21. Although more common in Europe and North America, there are growing numbers of cities with Local Agenda 21s in Africa, Asia and Latin America. The term was coined in Agenda 21, which called on local authorities to undertake 'a consultative process with their populations and achieve a consensus on a Local Agenda 21 for their community' through which they would meet the other goals in Agenda 21.

Local Agenda 21s are about 'good governance' for environment and development. At their best, they provide a means by which environmental issues become more integrated within the planning and management of an urban area. They combine meeting human needs with good practice in resource use and waste management, but within development plans rooted in local priorities and an understanding of local ecological context. They usually involve the production of a particular document - the Local Agenda 21 - but this should be developed through a broad, inclusive consultation process that seeks to draw in all key interests ('stakeholders') and to develop agreement between different (conflicting or competing) interests.

Local Agendas 21s can help address

limitations in local development planning and environmental management, especially where citizens, community organisations and NGOs feel that these represent their needs and encourage their participation. They also have some potential to integrate global environmental concerns into local plans. But there are three major limitations:

- Their effectiveness depends on accountable, transparent and effective local government (although they can also become a means for promoting these qualities) and most national governments are reluctant to allow local governments sufficient power and resources to be effective;
- Many Local Agenda 21s have difficulties in ensuring adequate attention to less obvious environmental issues such as the transfer of environmental costs to other people and other ecosystems, both now and in the future;
- Many Local Agenda 21s have difficulty engaging with and addressing the needs of the most deprived urban dwellers, although they are typically most at risk from local environmental health burdens such as inadequate water, sanitation and waste management.

The very name Local Agenda 21 implies international engagement. Organisations such as the International

Council for Local Environmental Initiatives (ICLEI) have made a concerted effort both to draw attention to the importance of local authorities in the international arena, and to create a network that can support new local initiatives.

If international support for Local Agenda 21s is to be successful, it is important that:

- national governments and international agencies give more support to their development and implementation;
- the consultation processes inherent to Local Agenda 21s be employed to increase stakeholder participation in relevant international funding decisions;
- suitable means be found both for financing initiatives emerging from Local Agenda 21s, and for evaluating them.

SUSTAINABLE TRADE

The importance of integrating trade and environment objectives into policymaking has grown vastly in importance since the first hesitant discussions in the Brundtland Report in 1987. Both Agenda 21 and the preamble to the Marrakesh Agreement establishing the World Trade Organisation (WTO) speak of trade and sustainable development – but these highlevel political statements of intent have not prevented policy deadlock within the WTO and other negotiating arenas. At the international level, discussions on trade and sustainability now focus around the WTO – its rules, remit and implications. The debate has often become polarised into a stand-off between 'developing countries and development versus developed countries and environment'. It is clear that the central message of the Rio Summit – that sustainable development requires the integration of social, economic and environmental dimensions of decisionmaking – has not become instinctive in the world of trade policy.

At the root of the conflict is the feeling that, despite its multilateral, rules-based nature, the WTO is effectively run by rich countries, and in the interests of rich countries. The failure of the WTO's Seattle Round to reach a successful conclusion is seen by many as the result of this division.

Meanwhile, as multilateral trade policy negotiations struggle to come to terms with the complex relationship between trade and sustainable development, social and environmental factors are becoming increasingly important to market access for many export-oriented businesses in the South. This is driven by a combination of commercial expectations and regulatory requirements.

Although these higher standards are sometimes associated with premium prices in export markets, they are often simply an 'entry ticket' rather than a source of added value for producers. Many producers and countries fear that eco-labelling and other social market instruments are a



barrier to market access rather than a source of competitive advantage. These fears are heightened by the complexity of existing product regulations and labelling. Meanwhile, many developing countries have a comparative advantage in certain "sustainable" products but are unable to grasp export opportunities due to a lack of capacity.

There is a crucial need for a positive response to these concerns through guidance to stimulate sustainable trade, through import facilitation, information sharing and capacity building services. This guidance needs to include the following critical elements:

- Cultivating demand: Consumer preferences for social and environmental values will often need to be cultivated through creative public education and social marketing.
- Encouraging local awareness raising and involvement: The awareness of producers and other local stakeholders has to be enhanced, through carefully targeted workshops and other initiatives at local and national sector level, backed up by clear and accessible information on market requirements and opportunities.
- Investing in process and product innovation: Moving to sustainable patterns of trade requires investments of time, commitment and finance,

and new support mechanisms for producers and other agents involved in trade.

- Rewarding improvement: Crucial to stimulating sustainable trade is the need to find ways of rewarding producers and traders that invest in more sustainable business practices, and to enable entrepreneurs in the North and South to build markets for sustainable products.
- Co-evolving standards: If producers and communities in developing countries are to capture the benefits of sustainable production and trade then they will need to be fully involved in shaping the standards. This will help to address suspicions of 'green protectionism'.
- ► Sharing governance: Sustainable trade requires different forms of governance for international trading networks, which ensure greater transparency and accountability of commercial transactions, and enable participation and involvement from hitherto marginalised stakeholders.

The Johannesburg Summit provides an opportunity to re-establish the links between the trade and sustainability policy debate and the realities of global trading relationships. Looking ahead, the priorities are to rebuild the trust so badly



damaged at Seattle and assemble the issues to make real trade-offs possible. This will mean reforms of the WTO to ensure internal and external transparency and accountability; much can also be done at the national level to open up trade policy and make better links with other policy areas. Sustainable development must also become part of all aspects of the WTO agenda. The time has come for the WTO to articulate that the end purpose of trade liberalisation is sustainable development. Much work needs to be done in looking at the real sustainable development impact of existing as well as future WTO agreements.

CORPORATE SOCIAL & ENVIRONMENTAL RESPONSIBILITY

Globalisation is putting corporations at centre stage. This has encouraged corporations, their stakeholders and others to consider their potential roles in eliminating poverty, building accountable systems of governance and ensuring environmental security. Companies are being subjected to unprecedented scrutiny from NGO campaigns, the media, consumers and investors, on a range of social, environmental and ethical issues. Many of these campaigns focus on multinational or global companies' operations in developing countries, underscoring the direct links between production in the South and consumption or returns on investment in the North.

This greater awareness of the impact of business on environment and development in the South is not restricted to Northern consumers, nor indeed to multinational corporations. Local campaigns against poor working practices and environmental performance are on the rise in many Southern countries. Yet in many export sectors the greatest pressure for change comes from Northern buyers further down the supply chain seeking to protect their brands, and imposing codes of conduct on their suppliers, or introducing private certification regimes as a result.

The rise of these initiatives among large companies has been dramatic. The language of corporate social and environmental responsibility (CSER) has entered the lexicon of mainstream business, and there is a burgeoning corporate consultancy sector providing advice to large corporations on reputation assurance, stakeholder dialogue and designing and implementing codes of conduct.

Although many of these initiatives are intended to improve environmental performance and social conditions in developing countries, southern perspectives on corporate social and environmental responsibility are not adequately represented in current debates, and there are few mechanisms which enable southern stakeholders to inform and influence corporate policy and practice. Critical voices are starting to question the verifiability of the



commitments that companies propose and the extent to which they genuinely assist sustainable development.

Two tightly inter-linked questions appear central to progress on bringing CSER initiatives in line with sustainable development goals:

Who decides? Beyond the basic policy framework, decisions in international trading chains are taken on the basis of commercial relations. Those with the strongest position are able to determine the terms of trade, not just for price and quality, but also for social and environmental dimensions.

Who benefits? Social and environmental improvements can be a 'double-edged sword', bringing technical improvements at the cost of socio-economic setbacks for some social groups. As trade liberalisation progresses, expands the supply base and places severe deflationary pressure on producer prices, suppliers – for example, in the food or garment sectors – can find themselves in the position of investing to improve performance, while receiving lower prices for their goods.

Aligning these two questions will require a much broader conception of a company's stakeholders than is currently the norm. For CSER to work in favour of sustainable development, corporations will need to take account of the interests of many constituencies that they have not traditionally dealt with, including vulnerable and marginalised groups. They will also have to come to terms with complex trade-offs and dilemmas. For example, should a mining company avoid operations in an area of rich biodiversity to prevent damage to this natural resource, or are the employment and foreign exchange earnings foregone more significant?

Answering these complex questions and harnessing corporate social and environmental responsibility for sustainable development will require greater investment in research, capacity building and partnerships between corporations, the state and NGOs in North and South.

URBAN DEVELOPMENT

Most of the world's urban population is now in Africa, Asia and Latin America; so too is most of the urban poverty. Urban areas also concentrate a high proportion of resource consumption, waste generation and greenhouse gas emissions in virtually all countries, and future levels for all these will be strongly influenced by the scale and form of urban development. However, urban centres also offer potential advantages for combining healthy and safe living conditions with resource-conserving, waste-minimising patterns of production and consumption.

Urban Opportunities

Well-managed cities contribute much to strong and adaptable regional and national economies. Cities reduce the cost of meeting the basic needs of many of the world's low-income citizens as





high densities and large population concentrations usually lower costs per household for the provision of infrastructure and services. The concentration of industries should reduce the unit cost of making regular checks on plant and equipment safety as well as on occupational health and safety, pollution control and the handling of hazardous wastes.

Cities can also set new standards in conservation and resource waste minimisation. For instance, the concentration of production provides more scope for minimising wastes or re-using or recycling them. In addition, wellmanaged cities can greatly reduce the dependence of higher-income groups on private automobile use. Making sure that these opportunities are secured in an increasingly urbanised world is one of the key challenges of the twenty-first century. A further challenge will be to ensure that the rights of the urban poor are recognised and that they can form more effective relationships with local government and other decision-makers.

Environment and development policy for cities should be integrated into wider regional concerns. Resource flows and waste streams into and out of any city show a scale and complexity of linkages with rural producers and ecosystems which demonstrates that 'sustainable urban development' and 'sustainable rural development' cannot be separated. The linkages can be positive in both developmental and environmental terms. Demand for rural produce from urban enterprises and households can support prosperous farms and rural settlements, where environmental capital is not being depleted.

Rural-urban linkages

The interactions and linkages between city and countryside are increasingly recognised as central factors in processes of social, economic and cultural change. In both cities and countryside, a significant proportion of households rely on the combination of agricultural and nonagricultural income sources, often involving the migration of one or several members over varying periods of time, or commuting between built-up and periurban areas. In addition, many urban enterprises rely on demand from rural consumers, and access to urban markets and services are crucial for most agricultural producers.

Getting urban issues onto government/donor agendas

Both urban poverty reduction and urban environmental issues have received a low priority from most development assistance agencies and many national governments. This reflects a longestablished belief that development problems would be more easily addressed if people remained in rural areas where they can grow their own food. It misses the key economic role of well-functioning urban systems and



reflects an inaccurate assumption that urban populations are privileged with government expenditure on basic services. Urban areas (especially major cities) may receive above-average levels of public expenditure on infrastructure and services but a large proportion of the urban population does not benefit from this.

Effective urban interventions depend on effective and accountable urban governments – but urban governments remain weak in most countries. The scope for success is greatly increased in countries with effective decentralisation programmes and where local democracy is strong. Another key part of the context for urban development is increased private sector involvement in the provision of basic services and infrastructure (such as roads, public transport, water, sanitation and waste management).

In addition, governments and international agencies do not give appropriate support to the many ways in which cities are built 'from the bottom up'. The informal sector remains critical for employment and livelihoods for many of the lowest-income urban residents, and many citizens also develop 'informal sector' solutions to their housing needs.

CLIMATE

The International Panel on Climate Change was established to investigate growing concerns that human activities might be affecting the global climate – and it has helped to generate a considerable degree of consensus on climate change.

This growing consensus encouraged the 1992 UN Framework Convention on Climate Change, while the 1997 Kyoto Protocol added mandatory reductions in emissions of carbon dioxide, methane. nitrous oxide and other powerful greenhouse gases, with an overall target of a 5% reduction from 1990 levels in the first commitment period, 2008-2012. But countries differ in their ability or willingness to forego carbon emissions in favour of global benefits, especially since 70% of all carbon emissions have been contributed by the USA, EU and the former USSR. Moreover, each country has its own for example China priorities, has abundant coal deposits that it wishes to burn, while the USA is not as enthusiastic as Europe about pricing gasoline so as to reduce consumption.

The stated objective of the 1992 convention was to return greenhouse gas emissions to 1990 levels by the year 2000. Although the Kyoto targets are far below the 60-80% emission reductions needed to achieve this, they did establish the principle that business as usual is not acceptable. Kyoto also laid the groundwork for future agreements based on the spread of technologies and other innovations (such as tradable permits to pollute) that will make it easier for countries to comply with more rigorous emission targets.

The apparent inevitability of continued climate change and the likelihood of



particularly serious impacts on particular countries or regions suggest more attention should be paid to adaptation investing in limiting the loss of property and threat to livelihoods and in being able to respond rapidly and effectively when extreme weather events occur.

ENERGY

The World Energy Assessment recently stated that the productivity of one-third of the world's people is compromised by lack of access to commercial energy, with an additional third suffering economic hardship and insecurity due to unreliable energy supplies.

At least two billion people, mainly in poor, rural areas, lack access to electricity. This does not mean that they do not use energy, but that they can only utilise it in very inefficient forms, and often in ways which are damaging to both human health and the environment. Inferior fuels such as charcoal, crop residues and cow dung make up about a quarter of the world's total energy consumption, and three-quarters of all energy used by households in developing countries.

A recent World Bank analysis shows the costs of such fuels: the urban areas of China alone lose about 20% of potential economic output because of the effect on human health of inferior energy use. In India, indoor air pollution from dirty fuels causes as many as two million premature deaths a year. However, the liberalisation of energy markets, shifts away from largescale energy projects by donors, and the emergence of grass-roots initiatives to secure energy provision all point to the possibility of more decentralised and cleaner energy infrastructures which are more likely to serve the needs of the poor.

It is a mistake to assume that the poor cannot or will not pay for energy. In both North and South, energy companies are aware that their 'social contract' depends upon delivering on-demand, clean, safe and unobtrusive energy, and there is evidence of willingness to pay for it. At present, costs for inefficient energy sources often entail much higher prices per kilowatt than is incurred by richer consumers who benefit from subsidised grid energy. Schemes in Bangladesh and India have demonstrated that users pay for decentralised energy will provision, often through extension of credit through microcredit initiatives. However, international agreement to support these approaches has been minimal. The Inter-governmental Group of Experts, convened by the UN Commission on Sustainable Development, has made little progress in developing a framework for the promotion of these approaches. A key challenge is to shift from a carbon-based energy strategy towards one that makes increasing use of renewable energies. If the Southern 'driver' for renewables is energy poverty and the need for 'off-grid' energy for livelihoods and economic growth, the Northern driver is environmental concerns.





WSSD should offer ways to bring these agendas together.

SOILS

Fertile soil and water are the two natural resources of most immediate importance to development. Although soil is a 'renewable resource' in that good farming practice and pasture management maintain its structure and fertility, the world's stock of good soil is declining – through soil erosion, salinisation, deforestation, desertification, pollution and conversion to urban or other uses.

Falling soil fertility threatens continued agricultural production in many parts of the developing world. In Africa, soil fertility decline is reducing the capacity of farmers to meet national food needs and increasing their vulnerability to crop failure. In West Africa, this has been aggravated by the marked decline in rainfall and harsh droughts experienced since the late 1960s.

Farmers seek to maintain the fertility of their soils through a variety of means – for instance through the use of different nutrient sources, choice of crops and use of different patches within the landscape. Typically, farmers focus limited supplies of soil nutrients on small plots where high value crops are sown, while lesser value crops allocated lower quality land.

While recognising that soil degradation is a risk to poverty and livelihoods, local diversity favours more decentralised, participatory approaches over seeking general solutions through national policies. These approaches seek the best means to help farmers and pastoralists (especially those with very limited land resources) enhance broader livelihood opportunities while enhancing soil fertility and building up assets. This requires a combination of macro-policy shifts and forms of intervention well tailored to the needs and constraints of particular farmers and settings.

It has often been hard to integrate national policies which affect soils management, because they span many different ministries. It has also been hard to inform national level policy debate by local field experience and perceptions. There are too few channels for information flow and communication linking bottom-up and top-down processes. These should now be strengthened, to create systems of 'soil security' for those who depend most upon this fundamental asset.

WATER

The future availability and quality of global freshwater supplies is a matter of increasing concern as populations grow and demand rises. The primary issues facing governments and societies are resource scarcity and resource degradation. In many countries growing demand for water to provide domestic supplies, to feed populations and to service export agriculture, industry and commerce is causing increasing scarcity in and



pollution of the water environment. In addition, in many of the world's regions with the highest population growth rates, physical unavailability of water is periodically exacerbated by droughts, most notably in sub-Saharan Africa.

scarcity As resource increases. competing economic uses may become a cause for conflict at a local level (such as the irrigation-pastoralist interface in the Horn of Africa) with negative effects on the livelihoods of the poor. While there have been few instances of 'hot' conflict over water resources shared between countries, inter-basin competition for resources between countries may increase and should be addressed by the international community.

The challenge facing planners is to ensure that the poorest have access to sufficient quantities of water, not simply for consumption, but to combine with other assets in order to furnish sustainable (rural and urban) livelihoods. Freshwater ecosystem resources are a significant component of rural livelihoods throughout the world, but they are probably of greatest importance in semiarid regions, in terms of food security.

Not only do rivers and lakes constitute abundant sources of protein in areas where it may be in short supply, such as the West African Sahel, but they may also represent concentrations of biodiversity within their region. However, they are subject to multiple threats through habitat destruction, upstream water abstraction, chemical and thermal pollution, the introduction of alien species and excessive harvesting. Future management of both surface and groundwater resources will increasingly need to include measures to control pollution from industrial, domestic and agricultural processes and the degradation of natural forest cover and range-land environments.

However, good local practice in water management allied to supportive national policy can reduce the gap between water needs and supplies. Indeed, the inefficiency with which water resources are used and managed in most commercial agriculture, industry and urban areas (often allied to underpricing) gives great potential for effectively increasing water supplies without drawing more on finite reserves. Good management is often the cheapest means of 'increasing' supplies. The constraint is not so much water availability as the capacity to manage it effectively.

Current moves towards a global effort at addressing the problems are being prepared for the December 2001 International Conference on Freshwater to be held in Bonn, Germany. Key issues should include identifying the best means of meeting the water needs of poorer groups within a broader policy framework of a 'sustainable water cycle' linking conservation, supply, use and reuse. Consultation across a range of stakeholders and livelihood systems and



between urban and rural 'water environments' will be necessary.

FORESTS

Only a fraction of the world's natural forests are being managed in ways which allow current yields of all goods and services to be sustained. Many policies, laws and markets still reflect only the forest values of dominant groups and notably timber or land reserves. Pursuit of these values alone is frequently the cause of local disenfranchisement and consequent poverty. Markets for timber and land do not encourage long-term maintenance of forests by local stakeholders, but support asset stripping, usually by external interests.

The overall trend remains towards deforestation – the annual rate of deforestation of 13 million hectares from 1990-95 for tropical forests appears to be on the increase. Any long-term deforestation trend has worrying ecological consequences – and in many places it also brings a serious loss of employment, income and consumption goods for rural settlements and small towns.

However, deforestation does not necessarily imply soil erosion or reduced water retention – this depends on the use to which the land is put, the quality of its management, and its spatial relation to remaining forests. There is a global trend towards stabilisation – presenting the possibility of a mix between intensively managed forests, plantations and agroforestry for products, and natural forests for environmental services.

Forestry policies can contribute much to poverty reduction if they enable local shareholders to be effective forest managers, through improving the security of their access to forest goods and services. This can imply that the state must transfer (or return) the control of forest resources to local people and accountable local institutions. Alternatives include binding partnerships between local groups and forestry corporations.

This requires, on the one hand, measures to restrain the power of those in whose hands forests are largely concentrated and who are looking for short-term gains. On the other, it requires incentives – for instance, marketbased instruments such as certification and fair trade - to influence corporations seeking positive long-term investment. Achieving security of forest environments, and supporting sustainable livelihoods for those who draw on forest resources, are thus not so much technical exercises as political processes.

Recent assessments of forest problems reveal considerable consensus on the significant challenges for making the transition to sustainable forestry. They could be summarised in one challenge: to build the institutions necessary for sustainable forestry. Such institutions will centre around multi-stakeholder processes, agreed principles and criteria for forestry management, a mature mix of regular





and market-based instruments building on recent practice.

BIODIVERSITY

Biodiversity sustains livelihoods and life itself. An estimated 40% of the global economy is based on biological products and processes. Human dependency on biodiversity is nowhere more keenly felt than in the communities of people who live in close association with it, drawing upon the enormous range of biological products and services to meet their daily needs.

Most of the volume and range of the world's biological diversity is to be found in the tropics. For example, there is more biodiversity on one tiny island off the coast of Panama than there is in all of Great Britain and a mere 7% of the Earth's surface holds between half and three quarters of the world's biodiversity. Many of the countries located in the tropical zone are economically poor and bear the costs of its continued existence but benefit the least. Powerful industrial interests are using these biodiversity rich countries as reservoirs of biological and genetic resources to develop new products such as crop varieties, drugs, biopesticides, oils and cosmetics or as sources of other 'goods and services', such as timber, wild animal skins and 'clean' air.

Biodiversity provides the range of resources necessary for maintaining natural resource productivity and good

nutrition and is implicated in mediating those environmental processes in soils, forests, wetlands, agroecosystems, rangelands and coastal zones that sustain livelihoods. However, plant and animal diversity is most valuable in supporting dynamic and complex livelihoods. A diverse portfolio of activities based on the contributions of wild and agricultural biodiversity (such as crop cultivation, harvest of wild plant species, herding, fishing, hunting) can help sustain rural livelihoods especially in the face of adverse trends or shocks.

On a global scale, the rapid changes in biological diversity may threaten the maintenance of fundamental ecological processes on which we all depend for our survival. The clearance of forests contributes to the destabilisation of the world climatic system and the erosion of plant and animal genetic diversity undermines the potential of agriculture to adjust to future pest epidemics and changed circumstances.

In the past, attempts to curb biodiversity loss involved setting up protected areas to which access is restricted. These management measures did, however, have negative effects on many peoples' livelihoods. For example, the Maasai of the Serengeti Plains in Tanzania, dispossessed of their lands, have been forced to migrate elsewhere, sometimes causing serious conflicts with agriculturalists in other regions of Tanzania.



Ť

Recognition of the need for multiple actions at all levels, from local to global, led to the formulation of the Convention on Biological Diversity (CBD). This Convention was negotiated with a view to combating these biodiversity loss trends by conserving and sustainably using biodiversity. It provides a legal framework for countries to develop policies, strategies and action plans, and to co-operate in protecting property rights and other interests on the basis of the equitable sharing of costs and benefits. Thus, it has to deal with several complex and politically explosive trends.

Prominent among these is biosafety. Negotiation of a Biosafety Protocol under the aegis of the CBD in 2000 means that the UN should oversee rules governing imports of genetically modified (GM) foods. Governments will be within their rights to ban imports of GM seeds and crops, if they believe these threaten the environment or people's health. Biosafety and TRIPS (trade-related aspects of intellectual property rights) are also issues on which the global movement towards free trade has clashed with groups expressing concerns on environmental, health and labour standards during the Seattle WTO conference in 1999. However, the Biosafety Protocol does not address means to ensure safe experimentation with GM crops, which is taking place on an increasingly wide scale in developing countries. The CBD and related issues, such as bioprospecting, TRIPs, and GM crops are at the centre of the environmental debate.

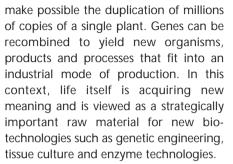
A new approach to wildlife conservation?

Over the last 20 years, over-extended government ministries have been unable to provide sufficient resources for wildlife conservation. At the same time there has been a growing realisation both from the conservation movement and within development theory of the importance of understanding the needs and perspectives of local people. This influenced a shift in international conservation policy. Some programmes based on participatory approaches to wildlife management were initiated in Africa in the 1980s. These have provided both inspiration and models for a wide range of participatory wildlife management projects and initiatives around the world. More recently the CBD emphasised three equally important objectives: conservation, sustainable use, and fair and equitable sharing of benefits - thus reinforcing the role of local people in wildlife conservation and management.

BIOTECHNOLOGY

Decades of selective funding to transform the biological sciences have fuelled a technological revolution in which life processes can now be engineered for commercial ends. Bacteria can be genetically modified to make human proteins and utopian cloning techniques





The new biotechnologies and bioindustrial products are expected to play a key role in the restructuring of prevailing systems. Two thirds of all biotechnology companies are focused on therapeutic or diagnostic applications and one in ten is applying biotechnology in food and agriculture. With few exceptions, scientific and technical capacity in the biosciences is centred on high-income nations, with transnational corporations being the leading players. As a result, biotechnology research focuses little on the food and health needs or interests of poor people and nations who have little or no purchasing power. Farmers, consumer and environmental organisations in the developed world also point out that the priorities of the biotechnology industry do not always coincide with those of the wider society.

Transnational corporations seek continued access and monopoly control over the biological and genetic wealth of developing countries. The extension of intellectual property protection, including patents, on the resulting products they market usually fail to take into account the informal contributions of indigenous peoples and farmers to the maintenance and development of genetic diversity through years of cultivation and husbandry.

Developing countries point to the interdependency of all nations and argue that sustaining biological diversity depends on their getting a fair share of the benefits derived from the biotechnological use of genetic resources that originated within their borders. However, the monetary and other values of current flows of genetic resources from the South to the North are not matched by an equitable transfer of funds and appropriate technologies from North to South.

FARMS AND AGRICULTURE

Although modern agriculture has successfully increased yields in many parts of the world, it has relied on technologies and practices not generally accessible to the poor. Some 1.9 billion people still rely on agricultural systems that remain largely unimproved with very low yields. With the number of hungry and malnourished people currently exceeding 800 million, the dual challenge is to produce more food at lower cost without increasing the extent of agricultural land, and to increase the income and livelihood options of all rural people.



What is Sustainable Agriculture?

Sustainable agricultural systems emphasise management – and knowledge-intensive technologies, and biological relationships and natural processes over chemically intensive methods. It integrates the use of a wide range of resource-conserving technologies for pest, nutrient, agroforestry, soil and water management. Byproducts or wastes from one component or enterprise become inputs to another. As natural processes increasingly substitute for external inputs, so the impact on the environment is reduced.

More from Less

There are three types of benefits from sustainable agriculture:

- 1) A sustainable food system means that more food is produced from fewer external inputs, thereby reducing dependence on exogenous technologies and subsidies, and value is added locally through agroprocessing and marketing, thus retaining economic surplus in the countryside.
- 2) More food is produced by production systems that work with, rather than against the natural environment, thus enhancing biodiversity and natural processes of regeneration.

3) More poorer producers or poor rural dwellers have access to productive technologies or income and employment possibilities, contributing to overall poverty reduction and diversified rural livelihoods.

The greatest output increases have occurred following a transition to agriculture sustainable in rain-fed agriculture largely missed by 'modern' agriculture. In the so-called Green Revolution areas, yields can be maintained or even increased following substitution of knowledge and management intensive technologies for external inputs. And in industrialised agricultural regions, yields may come down slightly, but farmers' economic margins often improve. In these three types of areas, poor farmers have benefited substantially from the transition. But even though more than two million farmers are now farming sustainably in many parts of the world, these remain relatively small 'islands of success'. New programmes of action are required to turn these 'islands' into 'continents'

MINING AND MINERALS

From the aluminium in the microchips powering the Internet revolution to the abandoned mines polluting streams, the mining and minerals sector touches the lives of many – in positive and negative ways.

浙

Despite yielding the minerals that set in motion the 'new economy,' this sector faces a number of critical challenges.

Over one quarter of all developing and transitional economies generate at least 10% of GDP from mining and at least 40% of their foreign exchange earnings from mineral exports, but these economies, as a group, have been less successful than others in moving along the path of economic development.

At the community level, mining and mineral processing have important economic and social impacts. On the positive side, mining projects can bring jobs, infrastructure, modern medicine and other benefits to remote regions. However, these benefits may well be inequitably shared – or partly or wholly offset by damage done to existing livelihoods and cultures. Moreover, if communities are not perceived to have been treated fairly, mining can lead to new social tensions, and resistance to mineral development, sometimes erupting in violence.

As world population grows, the demand for land increases for many uses, including conservation of biological diversity, recreation, farming, and watershed which are often seen as competing with or inconsistent with minerals development. Uncertainty over the ability to access land for mineral development imposes serious risks to industry, local communities and indigenous peoples who all have vital interests in how land is used and who makes the decisions. In many cases, legal regimes are unclear, contradictory and poorly administered.

On the environmental front, the impacts of mining are visible and can result in profound, often irreversible destruction of ecosystems. Indeed, mining operations have the potential to impact seriously the environment at every stage of the life cycle from exploration to closure (and rehabilitation). The environmental impacts of minerals extend beyond the mine site to include the damage caused during the manufacture, transportation, consumption and disposal phases.

All of these concerns are exacerbated by the fact that individual consumers do not generally buy minerals *per se*, the industry is characterised by little vertical integration and minerals markets are anonymous, which leads to an economywide problem of a disconnect between production and consumption. Thus, there is little or no room for consumers to make choices – or companies to be rewarded – for good practice in production.





The Mining, Minerals and Sustainable Development (MMSD) Project

In 1998, ten large mining companies formed the Global Mining Initiative (GMI) as a leadership exercise seeking to explore how the industry could contribute to sustainable development. A year later, these companies - through their membership in the World Business Council for Sustainable Development (WBCSD) - commissioned IIED to carry out an independent two-year project of participatory analysis seeking to understand how the sector as a whole could make this transition

Operating in full independence from the industry, the Project has set its foundations on the participation of the widest possible cross-section of groups holding a stake in the sector. In this way, MMSD aims to integrate some of the issues facing the mining and minerals sector at the global level with the target of proposing an agenda for change.

The Project is unprecedented in many ways, including its geographic scope, and the great diversity of people, institutions, and cultures with which it interacts. The central product of MMSD will be its Final Report which will document the state of the mining and minerals sector from the perspective of the transition to sustainable development and propose an agenda for future change in that direction. The Final Report will be published in March 2002 and will be available to participants at the Johannesburg Summit.

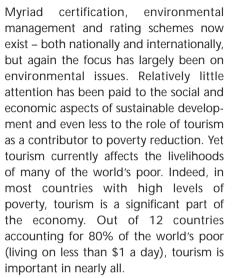
TOURISM

International travel and tourism is one of the world's biggest and growing industries. Developing countries currently have only a minority share of the international tourism market (approximately 30%) but the industry is growing (by an average of 9.5% per year since 1990 compared to 4.6% worldwide). The tourism industry makes important contributions to the economies of developing countries, particularly to foreign exchange earnings and employment. The economic significance of tourism varies greatly, with those economies most highly dependent on tourism tending to be small island states.

The World Tourism Organisation defined sustainable tourism as "leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems". Since then, the major – but not exclusive – emphasis of the tourism industry has been on environmental sustainability.

Following the 1992 Earth Summit, the World Tourism Organisation and the World Travel and Tourism Council (WTTC) produced *Agenda 21 for the Travel and Tourism Industry*: Towards Environmentally Sustainable Tourism.





Sceptics would argue that tourism, driven by foreign private sector interests, is not an activity suited to poverty elimination, that economic benefits are not maximised due to high level of foreign ownership, high leakages and few linkages, and that it imposes substantial non-economic costs on the poor, in terms of displacement, lost access to resources, and cultural and social disruption. However, many of the disadvantages associated with tourism are actually characteristics of growth and globalisation.

The industry agenda is evolving – both independently and in response to NGO campaigns for "fair trade", "responsible" or "ethical tourism". The World Tourism Organisation has put considerable energy into the sustainable tourism agenda and developed a Global Code of Ethics for endorsement by the UN. The private sector is taking a leading role in developing many new sustainable tourism initiatives.

Tourism has continued on the international UN agenda since the Rio Earth Summit and the CSD in April 1999 urged governments to 'maximise the potential of tourism for eradicating poverty by developing appropriate strategies in cooperation with all major groups, indigenous and local communities.' At the WSSD, the poverty focus needs to be stressed in the current debate as a balance to the considerable effort made to address the green agenda.





CONCLUSION



he Johannesburg Summit offers the first real opportunity for a decade to galvanise the international community – business, civil society, governments and intergovernmental organisations – around a raft of issues that are of paramount importance if we are to achieve sustainable development goals.

To be both productive and forward looking, there has to be real and verifiable content rather than sloganeering. The content must include strong Southern experience and understanding of the links between globalisation and local development, between environment and poverty, between trade and development, and between local, national and international governance.

Since Rio, speeches, policy papers and UN agreements are packed with commitments. The international community has tried to identify the problems and solutions - locally, nationally, regionally and globally. But while we have collectively spent more time on words than on action, life for many has been getting worse.

What does this mean for IIED, an institute that has made words its 'bread and butter' in its 30-year history? This time, we hope that the words generated by the Johannesburg Summit will lead to real change through the practical application of solutions.

There is no time like the present to shape the future.

WSSD WEBSITES



► Official Websites

OFFICIAL UN WEBSITE FOR WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT www.un.org/rio+10

HOST COUNTRY WEBSITE www.environment.gov.za/ earthsummit2002

UNITED NATIONS ENVIRONMENT PROGRAMME www.unep.org

UN COMMISSION ON SUSTAINABLE DEVELOPMENT SECRETARIAT www.un.org/esa/sustdev/csd

FINANCING FOR DEVELOPMENT www.un.org/esa/ffd

► NGO Websites

CSD NGO STEERING COMMITTEE www.csdngo.org

CENTRE FOR SCIENCE AND ENVIRONMENT www.cseindia.org

DEVELOPMENT ALTERNATIVES www.devalt.org

ECO-NEWS AFRICA www.econews.africa.or

ENVIRONMENT AND DEVELOPMENT IN THE THIRD WORLD (ENDA) www.enda.sn

FORUM FOR THE FUTURE www.forumforthefuture.org.uk FRIENDS OF THE EARTH www.foe.co.uk

GREENPEACE www.greenpeace.org

IUCN – THE WORLD CONSERVATION UNION www.iucn.org

INTERNATIONAL COUNCIL FOR LOCAL ENVIRONMENTAL INITIATIVES www.iclei.org

INTERNATIONAL INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT www.iied.org

INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT www.iisd.ca

STOCKHOLM ENVIRONMENT INSTITUTE www.sei.se

UNED FORUM www.unedforum.org

WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT www.wbcsd.org

WORLD RESOURCES INSTITUTE www.wri.org

WORLDWIDE FUND FOR NATURE www.wwf.org

While this is not meant to be a comprehensive list, we apologise if we left you out. For inclusion in our November 2001 volume, please contact us at: wssd@iied.org (Full contact details on back cover).



IIED'S 30th ANNIVERSARY CONFERENCE

- Equity for a Small Planet -

NOVEMBER 12-13, 2001 · LONDON

The conference will consider the dynamics and tensions between globalisation and local livelihoods. The principal aim of the meeting is to provide an international platform for Southern experiences to inform the agenda for the Johannesburg Summit.

Since its creation, IIED has explored and analysed the linkages between environmental, economic and social factors that affect development. The Institute aimes to design 'policies that work', both for society as a whole and for the poor and marginalised within societies.

NOVEMBER 12, 2001: INTERNATIONAL WORKSHOP (by invitation only)

Venue: Canada House, Trafalgar Square, London **Time:** 10am-6pm, registration at 9:30 am

Parallel workshop sessions will focus on Southern models and experiences of successful livelihoods development in the context of both globalisation and local private sector investment.

Workshop participants (about 70-90) will be drawn from Southern and Northern organisations, including representatives from government, the multilateral system, NGOs, civil society and the private sector. The debate from the workshop will feed directly into the forum the following day.

NOVEMBER 13, 2001: INTERNATIONAL CONFERENCE

Venue: Congress Hall, Trade Union Congress, 23-28 Great Russell Street, London Time: 10am-6pm, registration at 9am

Themes include: the Rio legacy and environmental governance; private sector leadership in sustainable development, and the role of local governance in support of local livelihoods.

A structured web-broadcast debate, with a panel drawn from the workshop and the forum speakers will be moderated by a distinguished journalist, and open to all conference participants to questions and comments from the floor.

Congress Hall has a seating capacity of 500. Participation at the conference will be by invitation and on a first-come/first-served basis. *To register for a free ticket (including lunch) on Tuesday, November 13, please contact us at:*

INTERNATIONAL INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT

Conference Organiser, 30th Anniversary Email: wssd@iied.org • Website: <u>www.iied.org/wssd</u>



THE FUTURE IS NOW • vol.1





International

Environment and

Development



CELEBRATING 30 YEARS IN ENVIRONMENT AND DEVELOPMENT 1971-2001

HOW TO CONTACT US

INTERNATIONAL INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT

3 Endsleigh Street London WCIH 0DD • United Kingdom Tel: 44 (0) 20 7388 2117 Fax: 44 (0) 20 7388 2826 Email: info@iied.org Website: www.iied.org

IIED MMSD

Mining, Minerals and Sustainable Development 1A Doughty Street London WC1N 2PH • United Kingdom Tel: 44 (0) 20 7269 1630 Fax: 44 (0) 20 7831 6189 Email: mmsd@iied.org

IIED DRYLANDS

4 Hanover Street Edinburgh EH2 2EN • Scotland • United Kingdom Tel: 44 (0) 131 226 7040 Fax: 44 (0) 131 624 7050 Email: drylands@iied.org

> Design and Production: www.greencom.ca Cover photo: Mark Hakansson, Panos



Printed on paper containing 100% post-consumer waste, acid and chlorine-free. ISBN 1-899825-80-0