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Memorandum for the World Summit on Sustainable Development

The 'Jo'burg-Memo

FAIRNESS IN A FRAGILE WORLD



IMPRINT

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Memorandum for the World Summit on Sustainable Development

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The Jo'burg Memo

FAIRNESS IN A FRAGILE WORLD

Memorandum for the World Summit on Sustainable Development

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“Challenged by the goals its political leaders had set at the Millennium Summit, and shocked into a stronger sense of common destiny by the horror of 11 September 2001, during the following twelve months the human race at last summoned the will to tackle the really tough issues facing it.

In passionate debates, held in the meeting-rooms and corridors of three great world assemblies, it painstakingly assembled the tools, thrashed out the strategies, and formed the creative partnerships that were needed to do the job.”

That’s what I should like to read in fifteen years’ time.

Let’s resolve to make it come true!

Kofi Annan

Foreword

What will be the legacy of the Johannesburg World Summit on Sustainable Development? Will it be remembered as an “historic” watershed, as we now regard the 1992 Rio Earth Summit? Will it serve to catalyse and renew commitments for the failed promises of Rio? Will Johannesburg generate results that will be worthy of celebration, or will it lead to yet another meaningless global photo opportunity?

We publish this Memorandum a few months before the Summit, at a critical juncture of renewed political momentum. It is our contribution to the debate on both the desired outcomes of the Summit and the critical path for the sustainable development agenda in the next decade.

The composition of the Memorandum’s authorship reflects the diversity of our international network, from North and South, from East and West, from NGOs, science, politics, and business. The meetings of the Memorandum Group were convened in both the venues of the 1992 Earth Summit in Rio and the forthcoming Johannesburg Summit, as well as Berlin, the capital of an EU Member State whose government has started to take serious steps towards translating sustainability into concrete policy. The launch of the Memorandum will take place in New York, which serves as both the financial capital of the world and the seat of the United Nations.

The Memorandum raises the central but oft-forgotten question “Development yes, but what kind of development and for whom?” Its recommendations are grounded firmly in the principles of ecological sustainability and equity. The text concentrates on elaborating on the mutual and intricate relationship of ecology and equity, while not pretending that it deals exhaustively with poverty eradication in all its manifold dimensions. It combines a critical account of the post-Rio decade with a rich set of proposals how to change the paradigms of unsustainable development and to promote civic, social and environmental rights. In spite of different views on the ongoing process of globalisation the authors agree about the urgent need

to re-integrate markets in a framework of social and environmental regulations and limitations on a local, regional, national and global level. The demand for a redistribution of rights and resources stands in the very centre of the memorandum.

The authors enjoy the privilege of being able to generate new ideas removed from the constraints and pressures of official decision-making processes. Nevertheless, we do hope that the Memorandum’s comprehensive set of recommendations might assist the official preparatory process and ultimately the elaboration of the Summit’s final outcomes. We are convinced that Memorandum’s conclusions represent elements of the new sustainability agenda that will hopefully shape the work of the international community in the years to come.

We express our sincere thanks to the authors, which met three times on the invitation of the Heinrich Böll Foundation to discuss the substance of this Memorandum. The co-ordinator and editor, Wolfgang Sachs, and his assistant Heman Agrawal, have artfully mobilised the group and drafted large parts of the Memorandum. Sue Edwards, Johannah Bernstein, Smitu Kothari, Christoph Baker, Dane Ratliff and Hermann Ott, also assisted at various stages. Last but not least, we extend our appreciation to the staff of the Foundation, both at its Berlin headquarters and its Johannesburg and Rio offices. These colleagues provided the right set of conditions, which guaranteed fruitful and productive meetings, and they ensured the publication of the Jo’burg Memo in a remarkably short time. Our special thanks go to Jörg Haas, head of the Foundation’s Rio+10 program, who accompanied the creation of this Memorandum from beginning to end.

April 2002

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For the Hurried Reader...

The UN Conference on Environment and Development in Rio 1992 launched “sustainable development” as a new name for progress. The idea caught on worldwide, but the results thus far have been mixed. After ten years, in August 2002, the World Summit on Sustainable Development in Johannesburg will be an occasion for reflection and reassessment. At this occasion, the international community will try to address the challenges posed by chronic poverty and resource-hungry affluence.

This Memorandum suggests an agenda for equity and ecology for the decade to come. It has been drafted by a group of 16 independent activists, intellectuals, managers, and politicians who were brought together by the Heinrich Böll Foundation in order to contribute to the global debate from a civil society perspective. It is neither a political platform nor an expert study, but a “memorandum” in the true sense of the word; it attempts to state what we feel must be kept in mind.

Southern countries – foremost the host country South Africa – intend Johannesburg to be a development rather than an environment summit. This is fully justified, given the systematic neglect of equity and fairness in world politics. Yet, it would be a regression of sorts, a retreat from Rio, if this were to result in further neglect for the state of the Biosphere. On the contrary, this Memorandum argues that it is high time that the South (along with economies in transition) embrace the environmental challenge. Environmental care is key for ensuring livelihood and health for the marginalized sections of the world’s citizenry. In fact, there can be no poverty eradication without ecology. Moreover, an environmental strategy is indispensable for moving beyond the hegemonic shadow of the North, leapfrogging beyond fossil-based development patterns which are now historically obsolete.

Part 1 – Rio in Retrospect – appraises the 10 years that have passed after the Rio Conference. It points out the paradox of how the Rio process has launched a number of successful institutional processes, without, however, producing tangible global results. In particular, economic globalization has largely washed away gains made on the micro

level, spreading an exploitative economy across the globe and exposing natural resources in the South and in Russia to the pull of the world market.

Part 2 – The Johannesburg Agenda – identifies four background themes which ought to run through all the debates at the Summit. Above all else, this question is critical: what does fairness mean within a finite environmental space? On the one hand, fairness calls for enlarging the rights of the poor to their habitats, while on the other hand, it calls for cutting back the claims of the rich to resources. The interests of local communities in maintaining their livelihoods often collide with the interests of urban classes and corporations to expand consumption and profits. These resource conflicts will not be eased unless the economically well-off on the globe move towards resource-productive patterns of production and consumption.

Part 3 – Livelihood Rights – counters the conventional wisdom that poverty eradication is at odds with environmental care. On the contrary, livelihoods cannot be maintained unless access to land, seeds, forests, grasslands, fishing grounds, and water is secured. Moreover, pollution of air, soils, water, and food chronically undermines the physical health of the poor, in particular in cities. Environmental protection, therefore, is not a contradiction to poverty elimination, but its condition. With regard to the poor, there will be no equity without ecology. Given that resource conservation is based on stronger community rights, also the reverse is true: there will be no ecology without equity.

Part 4 – Fair Wealth – emphasizes that poverty alleviation cannot be separated from wealth alleviation. The global environmental space is unequally divided; obtaining more resource rights for the low-consumers in the world implies reducing the resource claims of over-consumers in North and South. The affluent will have to move towards resource-light styles of wealth. This is not just a matter of ecology, but of justice; otherwise the majority of world citizens remains deprived of their fair share of the natural patrimony. As both the climate and the biodiversity convention suggest with regard to nations, there will be no equity without ecology. Conversely, there will be

no ecology without equity because agreements will not be achieved unless they are seen as fair.

Part 5 – Governance for Ecology and Equity – proposes changes in institutional frameworks at the international level for strengthening environmental stewardship and livelihood rights.

Rights. Democratizing governance systems is the best way to protect the environment. A framework convention on the resource rights of local communities would consolidate the rights of the inhabitants of resource-rich areas, whose livelihoods are threatened by mining, oil, logging, and other extractive industries. Furthermore, environmental rights – including the right to full information, consumer rights, and the precautionary, prevention and polluter pays principle – must be enshrined into law at all levels.

Price structures. Market prices must better reflect the true nature of environmental costs. Full cost accounting requires the removal of environmentally perverse subsidies as well as tax reform, where taxes are shifted from labor to resource consumption, pollution, and waste. Full cost accounting also requires user fees for the global commons, in particular the atmosphere, the sky and the seas. Full cost pricing will ensure that economic decisions are made with minimal environmental impacts.

Market governance. International trade regimes must foster sustainability and fairness, not just economic efficiency. From this viewpoint, WTO-style market liberalization threatens social coherence, undermines food security and threatens ecosystems everywhere. What is needed between North and South is not free trade, but fair trade. Free trade must be subservient to the larger causes of human rights and sustainability. This means that nations should have more opportunities to regulate trade for the protection of the public good. This also requires that environmental treaties must have priority over trade agreements. Furthermore, both trade relations and the conduct of economic actors must be adjusted to promote human rights and sustainability. Over and above verifiable corporate codes of conduct, a framework of socially accountable production is called for, whose principles apply to all commercial activities. Finally, the global financial architecture should be

overhauled along with a speculative currency exchange tax, debt relief and expanded electronic cross-border barter trade.

Institutional innovations. A new historical agenda must be embedded in new institutions. First, UNEP must be upgraded into a World Environment Organization. Second, a decentrally organized International Renewable Energy Agency must be established. And finally, the Memorandum argues in favor of an International Court of Arbitration.



Part 1

Rio in Retrospect

The late Prime Minister Chou En-lai of Communist China was once asked by a journalist what he thought of the French Revolution. Chou En-lai hesitated for a moment, and then replied: "It's too early to tell."

The same can be said about Rio 1992. Not unlike the French Revolution, the significance of the United Nations Conference on Environment and Development, called the "Earth Summit", is still undetermined. History will eventually decide. In any event, at a distance of 10 years, Rio 1992 looks like a picture puzzle. Just as a picture puzzle shows different images, which, depending on the preconception of the onlooker, flip from one shape to the other, the event of Rio gives rise to a variety of interpretations, depending on the vantage point of the observer. Ministers judge the process differently than peasants, chief executives differently than consumer groups, computer programmers differently than ethnologists and Northerners differently than Southerners. The memory of Rio is a terrain of contestation, and so will be Johannesburg.

We, the authors of this memorandum, will also argue from a particular point of view. As a group of like-minded individuals, we speak from a civil society perspective. Our arguments are in many ways drawn from the experiences of social initiatives in communities and cities, churches and companies, as well as the rich policy-making experience of so many NGOs worldwide. In 1992, we recognized ourselves more in Rio's parallel event, the Global Forum, where civil society groups drafted a set of alternatives treaties to the declarations of the intergovernmental conference. From a range of countries and backgrounds, we position ourselves at the edge of power, aware of the privilege of not having to run things. What we share is the deep concern about the organized irresponsibility that rules the globe, and the conviction that change towards a world more hospitable to people and mindful of nature is possible – and indeed indispensable. It is a commitment to justice as well as to environmental protection, which guides our review of the Rio process and our proposals for the next decade. It is in this spirit that we decipher the picture puzzle of Rio 1992, with the hope of clearing the view for the Johannesburg Summit and beyond.

1.1 A Boost for Environmental Politics

Rio was a watershed in mainstreaming environmental concerns. The very fact of an Earth Summit hosting countless heads of state to sign agreements for the rescue of nature, has boosted environmental politics everywhere. Many countries across the globe have launched National Environmental Action Plans, budget lines have been established, and environmental legislation has been drafted. Moreover, monitoring and impact assessment has enriched the toolbox of administrations, while nearly every country created environmental ministries. At the international level as well, things have changed, and the development agencies of most donor countries have reoriented their operations in the light of Rio's Agenda 21. Environmental issues have thus been elevated onto the political agenda. Rio helped establish environmental management as a duty of governments worldwide.

Rio catalyzed new forms of international governance as well. Most prominently, a new body of international law was created by a set of Conventions, among them the Framework Convention on Climate Change and the Convention on Biological Diversity, followed later by the Convention to Combat Desertification and treaties on managing migratory fish stocks, controlling trade in hazardous chemicals, and phasing out persistent organic pollutants. Along with them, a range of supranational structures and processes has seen the light; in fact, the various Conferences of the Parties, Subsidiary Bodies for Scientific and Technological Advice, Protocols, intergovernmental advisory panels, and compliance mechanisms

amount to an intricate machinery for multilateral decision-making on biosphere politics. In addition, the Agenda 21 gave birth to the Commission on Sustainable Development, which has institutionalized sustainable development debate between state and non-state actors.

Furthermore, the concern for nature has not only filtered into politics at the administrative level, but at the cognitive level as well. The very notion of "sustainable development", around which the Rio Conference revolved, has evolved into a highly successful compromise. While developers and environmentalists had opposed each other for decades, the concept forced them onto one common terrain. Shell together with Greenpeace, the World Bank as well as the anti-dam movement invoke "sustainable development"; few outrightly deny the concept. On the contrary, the idea works like an all-purpose cement, gluing everybody together, friends and foes alike. In the wake of this semantic innovation both the development enthusiasts and the nature lovers had to revise their positions, creating a common ground that facilitated a productive exchange between established institutions and their vocal opponents. Certainly, the price paid for this consensus was clarity. Dozens of definitions are used by experts and politicians, with the result that conflicting interests and visions disguised as the same idea. But precisely this power of inclusion proved to be the strong point of "sustainable development". Rarely had a conference made such an impact on the political landscape simply through the means of language.

1.2 Lighthouse for Civil Society

In contrast with the intergovernmental conference, the assembly of civil society organizations, the "Global Forum", proved to be the real hotbed for ideas and projects. However, both events were intertwined in a symbiotic relationship. The official UN Conference would not have occurred without two decades of awareness building and "militancy" on behalf of the international environmental movement. Likewise, the parallel Global Forum would not have mobilized

without the neighboring summit of power and prominence. In subsequent years, as the number of NGOs exploded in many countries, opposition groups often benefited from the legitimacy acquired in Rio. In fact, in recent years, NGOs have come to call on the legacy of Rio to mobilize support for their concerns.

However, in comparison with the initiatives of civil society, businesses and municipalities, national governments did anything but excel in sustainable

development. Had it not been for the aforementioned actors, the impact of Rio would probably have gone unnoticed in many countries. The message of Rio has been disseminated widely by civil society groups launching public debates, setting up research centers and producing publications, by advocacy groups fighting against destructive development projects, by companies reengineering their production cycles and reinventing their products, and by local governments promoting public transport, pesticide-free agriculture or energy-efficient housing. In fact, eco-efficient innovations in business and the diffusion of local Agenda 21 programs have probably been the most noticeable byproduct in this sense. And, for instance in biodiversity, women initiatives have launched a critical debate on preservation and regeneration of genetic resources. There are numerous pockets throughout the world where a great deal of remodeling for sustainability has happened and where competence for transition has matured. It is in these niches that experiments have been made and future

options prepared, which might be vital when crises trigger change. Rio has thus found its broadest echo not with governments, but with initiatives at the micro level.

It was enormously helpful, however, for civil society to be able to resort to Rio 1992 as a point of reference. Throughout the last decade, non-governmental initiatives routinely prodded governments into action, confronting them with their own commitments. In the name of sustainability, Rio created a space of legitimacy for dissident and innovative action, even if carried out at times in outright opposition to government, corporations or multilateral institutions. Rio became the thorn in the flesh of the powers to be. Like a constitution, the declarations of Rio served as a readily available weapon to bind power-holders to their public duty. And just as a constitution's validity is in no way undermined simply because it is not adhered to, so does Rio 1992 not become worthless simply because words are not followed by deeds.

1.3 Unfulfilled Promises

Yet, looking at the broader picture, Rio 1992 reveals itself a vain promise. While governments at the Earth Summit had committed themselves in front of the eyes and ears of the world to curb environmental decline and social impoverishment, no reversal of these trends can be seen a decade down the line. On the contrary, the world is sinking deeper into poverty and ecological decline, notwithstanding the increase of wealth in some specific places. As though nothing had happened, the world continues to head for small and large disasters. Surely, governments are not the only actors to blame for the alarming state of affairs in light of the fact that the interlocking pressures of modernity are greater than government power alone. Nonetheless, governments have broken the promises of Rio, as they have routinely showed indifference, if not outright opposition to the very commitments they had signed for in the first place. Fifty years from now, when the Earth is likely to be hotter in temperature, poorer in diversity of living beings, and less hospitable to many peoples, Rio 1992 might be seen as the last exit missed on the road to decline.

We will not review in detail the declining environmental trends of the last decade. However, the overall picture is grim. Simply stopping upward trends in resource consumption is insufficient when what is truly needed are steep downward trends are instead. In global aggregate terms, the only good news (at least for the environment, while not necessarily for people) is that the global surface area under environmental protection has increased, that CFC production has declined, and that the global carbon emissions have stagnated at 1998 levels. Apart from these cases, however, the excessive strain placed by human beings on nature's sources, sites, and sinks has continued to rise. The extinction of species and habitats has increased, the destruction of ancient forests continues unabated, the degradation of fertile soil has worsened, over-fishing of oceans has continued, and the new threat of genetically engineered disruption has emerged. Of course, global aggregate figures conceal successes in particular places, just as they hide break-downs in others. As life is planetary in scale, what matters however in the end, is the integrity and resilience of those webs of life, which

form the Biosphere. Even if the surgery at Rio was a success, the patient's overall health has definitely not improved.

Rio, however, was not just about the environment; as the title of the conference programmatically implied, it was about development as well. For Southern countries, the inclusion of development had been crucial at the preparatory stage of Rio, otherwise they probably would not have endorsed the idea of a UN Conference. At the time, the South had just emerged from the "lost decade" of the eighties and insisted on obtaining a greater share of resources in exchange for new environmental protection measures. It saw the "Rio Bargain" as the promise of considerable resource transfers in support of Agenda 21, once countries would sign on the dotted line of the environmental conventions. It not only seemed that the North would listen, as its own interests were now at stake, but that the end of the Cold War would fuel new expectations about a forthcoming peace dividend. This hope has been deeply frustrated. The UNCED Secretariat had estimated that US\$ 600 billion would be required each year between 1993 and 2000 to implement the Agenda 21 in the low-income countries, of which US\$ 125 billion was to come from

official development assistance. Towards this goal, the rich countries went as far as to reaffirm their commitment to reach the target of providing 0,7% of their GNP as ODA. But promises have faded just as quickly as the years that have passed since Rio. In reality, ODA flows have fallen from US\$ 69 billion in 1992 to less than US\$ 53 billion in 2000 (French 2002). Moreover the pledged additional investments did not materialize. The only tangible financial outcome of Rio is about \$5 billion worth of commitments, mostly for the Global Environmental Facility, which have only been partially spent. In addition, the much-discussed transfer of environmental technology has largely remained a non-starter. Finally, if the attitude adopted by the North towards the South was still ambiguous at Rio, the subsequent years left no further doubt. Not only have the Rio commitments remain unfulfilled but the South has often faced benign neglect on other occasions as well. These include the structural adjustment policies of the IMF, the Social Summit at Copenhagen, the debt relief programmes of the G7, the falling commodity prices on the world market, not to mention the politics of arrogance of the WTO. To put it bluntly, the South has been taken for a rough ride in the decade after Rio.

1.4 Marrakech Trumped Rio

It took just two years for the very governments that had presented themselves as stewards of the Earth in Rio, to reconvene as vendors of the Earth in Marrakech. With the establishment of the World Trade Organization in January 1995, they cheerfully accepted obligations whose unintended effects amount to a quicker sell-out of the natural heritage worldwide. While Rio was concerned with the protection and prudent use of natural riches, Marrakech, in conclusion of the Uruguay Round of the GATT, was concerned with the unconditional access of corporations to the natural assets. While Rio promoted the effective authority of states to implement rules in favor of the public good, Marrakech weakened the regulatory power of states in favor of free corporate mobility. As a result, international politics in the past ten years was dominated by relentless attempts to create a borderless world market where capital and goods (but not people!) could freely move about,

driven only by the law of demand and supply. Far from giving priority to sustainability or democracy in running world affairs, elites in both the North and South came to consider the freedom of markets the supreme value in politics. While Rio was good on rhetoric, Marrakech was fast on implementation. This reversal of priorities has put a brake on any serious progress after Rio, sometimes even reversing the process into a decline.

As neo-liberal globalization rises as the dominant form of globalization, three impacts can be distinguished. First, it is the professed goal of globalization to expand economic growth in scale and scope. However, with the outflow of investment capital from OECD countries, an historically outdated model of development is spreading to the newly industrializing countries and well beyond. That fateful style of economics which rests to a large degree upon the transformation of unpaid natural values into commodities, is

now expanding to the far corners of the Earth. Growth in national income has historically always been accompanied by growth in resource consumption. However, the latter growth curve only delinks from the former in a post-industrial economy after having reached high level of unsustainability. Moreover, deregulation occurs within a system where prices do not tell the ecological truth. Therefore any expansion of the market, even with a per-unit efficiency increase, hastens environmental degradation in the end. No wonder that forests disappear, soils erode, and the sky fills up with carbon. The surge of economic expansion, spurred by trade liberalization, has largely washed away the modest gains, which might have materialized in Rio's wake.

Second, the pressure of open markets has forced quite a few Southern and Eastern countries to accelerate the exploitation of their natural treasures. With structural adjustment more or less becoming a permanent affair, fiscal restraint, cuts in social expenditure and export promotion, are measures to guarantee a stable playing field for investors and traders. In an effort to stabilize currencies and make payments on foreign debts, speeding up the extraction of mineral and biological resources for export is an easy short-term solution. By throwing larger quantities of oil, gas, timber, metals and other resources onto the world market, countries hope to keep their export earnings from deteriorating. In desperate times, governments have to sell off even the "family silverware". For example, Russia rushed to sell off the treasures of Siberia, Senegal offered fishing rights to Spain and Japan, Mexico facilitated forest exploitation after the Peso crisis, as did Brazil and Indonesia. When a country's standing on the world market is at stake, sustainability is shelved.

Third, under the pressure of the world market, governments often sacrifice the protection of public goods for the commercial interests of private actors. Compelled to provide hospitable conditions for mobile capital, they are unenthusiastic about any new regulation and rather inclined to retreat from rules that exist. As the cost of displacing production units from one country to another drop considerably, transnational corporations are in the position to choose at will the political and institutional conditions they consider most favorable across the globe. Economic power is thus converted into political power, since corporations are now able to play the prospect of jobs and taxes out against the adherence to urban, environmental and social rules. Governments have

faced the same dilemma in social as well as in environmental matters: When protection most matters they become less capable of providing it.

However, at a cognitive level the official documents of Rio had in part already accommodated the rise of economic rule. Rio did not hide its support for unrestrained markets. Chapter 2 of the Agenda 21, for instance, recommended "promoting sustainable development through trade liberalization and making trade and environment mutually supportive" (Art. 3). Governments were therefore expected "to take into account the results of the Uruguay Round and to promote an open, non-discriminatory and equitable multilateral trading system" (Art. 9). A neo-liberal prejudice was thus already built into the Rio discourse; after all, a number of lobbies had lined up at the time to ensure that the unconditional and unregulated mobility of corporations was seen as part of the solution rather than as part of the problem. This was facilitated by the view, however questionable, that economic growth was a condition for sustainability, and that unrestrained markets were drivers for efficiency. More often than not, environmental protection was portrayed as the result of privatization and deregulation. Increased efficiency in resource use would unfold if the market could remain free from constraints, an argument which might be correct for specific cases, but not in the face of large-scale expansion. Rio has thus helped to frame the sustainability agenda in terms of growth and free trade. Unfortunately, as the pro-free trade view gained currency in subsequent years, it became increasingly clear that some seeds of failure had already been planted in Rio itself.

When a country's standing on the world market is at stake, sustainability is shelved

1.5 Slippery Development Talk

It was an unholy alliance between Southern and Northern governments in favor of development-as-growth that has largely emasculated the spirit of Rio

Rio failed to bid farewell to the conventional idea of development. On the contrary, governments at Rio, while acknowledging the declining state of the environment, insisted on a relaunch of development. In most of the Rio documents, the right to development is put on a pedestal, and a great deal of diplomatic caution went into making sure that no phrase could be read as intending to curtail development. However, development can mean just about everything, from pulling up skyscrapers to putting in latrines, from drilling for oil to drilling for water, from setting up software industries to setting up tree nurseries. It is a concept of monumental emptiness, carrying a vaguely positive connotation. Therefore, it is easily used as a vehicle for contradictory perspectives. On the one hand, there are the GNP champions who identify development with economic growth per capita, undisturbed by the insight that growth often mines natural and social capital for producing more money capital. On the other hand, there are the champions of justice who identify development with more rights and resources for the poor and powerless, building on social and natural heritage. Putting both perspectives into one conceptual shell is a sure recipe for confusion, if not a political cover-up. Many of Rio's shortcomings derive their genesis from the slippery nature of the core concept of development.

As a result, the notion of sustainable development has been stripped of any clear meaning by linking "sustainable" to "development". It comes as no surprise that adding a qualifier to a conceptual shell can only result in confusion. What exactly should be kept sustainable remained forever elusive, giving rise to eternal quarrels about the nature and scope of sustainable development. Already the World Conservation Strategy in 1980, which for the first time referred to the notion "sustainable development", had performed the decisive semantic operation by shifting the locus of sustainability from nature to development. While "sustainable" previously referred to living resources, such as forests or fishing grounds, it now referred to development. Hence in the subsequent years, all sorts of actors, passing from power-driven governments and profit-driven corporations to indigenous peoples and city action groups, have been able to couch their intentions in terms of sustainable development.

With "development-as-growth" easily embedded within the sustainable development idea, it has been difficult to escape the shadow of the growth ideology generated at Rio and beyond. This has had enormous consequences for the development and understanding of the concept of sustainability. For if growth is taken as a natural imperative, all efforts become focussed on reforming the means of growth, i.e. technologies, forms of organization, incentive structures, while the ends of growth, i.e. those levels of comfort, choice, and consumption reached by the most advanced country, are taken for granted. In such a scheme of things, awareness of nature's carrying capacity was bound to fall into oblivion. Such an awareness, however, throws the open-ended nature of growth into question. Where does growth lead to? What ends could justify the appropriation of finite natural resources? The production of tanks, the construction of highways, or the provision of food for the hungry? After all, it is evident that societies running on automobiles, supermarkets, urban sprawl, chemical agriculture and oil-guzzling power plants will hardly ever become sustainable. Yet the development-as-growth philosophy precludes such questions, ignoring the idea of limits; this is another reason why the Rio process excelled in harmlessness.

It was however politically expedient for everybody, the North, the South, and the ex-communist countries, not to question the development-as-growth philosophy. Both the South and the economies in transition could continue to phrase their demands for justice and recognition as demands for unlimited economic growth, without making crucial distinctions as to "what kind of growth?"; "for whose benefit?"; "growth in which direction?" As for the North, needless to say that with the blessing of "development", the protagonists of growth could feel justified to rush ahead on the economic racetrack. Because "development" has remained uncontested, the relentless pursuit of over-development and economic power on behalf of the North never came into the focus of official environmental policy. In this way, the elites in the South and the North could reconcile themselves with the outcome of Rio. Indeed, it was an unholy alliance between Southern and Northern governments in favor of development-as-growth that has largely emasculated the spirit of Rio. Will the World Summit in Johannesburg be able to rekindle this spirit?

Rio in Retrospect

- Rio gave a boost to environmental politics in governments and business worldwide. It laid the groundwork for international governance in biosphere politics.
- Rio increased the legitimacy of micro-level initiatives for sustainability in civil society, business, and municipalities.
- However, the North backtracked from the Rio Bargain, and the South continued to show scarce interest in environmental affairs. The overall health of the planet further deteriorated and global inequality increased.
- Meanwhile, governments prioritized WTO agenda over their Rio commitments, poised to create a borderless world market.
- Rio could not bid farewell to development-as-growth philosophy. What kind of development, for whose benefit and in which direction are crucial distinctions when talking of sustainability.



Part 2

The Johannesburg Agenda

It is the challenge of Johannesburg to move beyond Rio, yet it is the danger of Johannesburg to regress behind Rio. The Rio Conference on Environment and Development strove to address two major crises: the crisis of nature and that of justice. Environmentalists – often from the North – were expected to take into account the desire of the majority of the world's citizens for a life beyond poverty and distress. By contrast, developmentalists – often from the South – were called upon to recognize the disastrous repercussions of a deteriorated nature base. Typically, environmentalists were seen to be opposing deforestation, chemical agriculture or expansion of power plants, while developmentalists were pushing for marketing timber, expanding food supplies or electrifying villages. Therefore, the Earth Summit aimed at integrating the environment and development agendas to liberate policy makers from the dilemma of either aggravating the crisis of nature by pushing for development, or conversely, aggravating the crisis of justice by insisting on the protection of nature.

As it turned out, the Rio process fell short of fulfilling this ambition. How to respond to the desire for justice without upsetting the biosphere is still a puzzle for the 21st century. Of course, the fact that helping people and helping nature can go hand in hand, has been demonstrated in many instances: in organic agriculture, in sustainable forestry, and in resource-efficient industries as well. But on a macro-scale, the reconciliation of environment and development agendas remains light years away. Furthermore, if things are not brilliant with regard to the environment, they are worse when it comes to development. Despite the prominence of "development" in all the Rio documents, the demand of the South for recognition and equity has largely been frustrated during the past decade, reinforcing the fear of many Southern countries of falling further behind, and remaining forever excluded from the blessings of the modern world.

Against this background, the South – and in particular South Africa – intend to transform Johannesburg into a development summit rather than an environment summit. While Rio was considered to be dominated by the North, it is hoped that Johannesburg will be the Summit for the South. Indeed, the conference title "World Summit for Sustainable Development" clearly reflects the intention to elevate "development" on the political agenda. This, in our view, is justified, given the systematic neglect of the equity agenda in world politics. More so, we feel it is high time to concentrate the spotlight on the structural inequities that trap the majority of people around the globe into miserable and undignified living conditions.

Yet, we believe that focussing on a development agenda as if the worldwide crisis of nature did not exist, would signify sliding back behind Rio. It would be a regression of sorts, a roll-back in the growing sensibility towards the finiteness of the natural world. And it would be a disservice to the South, since equity can no longer be separated from ecology. Instead, fulfilling the ambition of Rio requires the effective response to the demand for equity arising from the South, but in a manner, which takes full account of the bio-physical limits of the Earth. Some

claim that humanity faces a choice between human misery and natural catastrophe. This choice is false. We are convinced that human misery can be eliminated without catalyzing natural catastrophes. Conversely, natural catastrophes can indeed be avoided without condemning people to a life of misery. Getting ready to meet this challenge, however, requires revisiting the technologies, the institutions, and the world views that dominate the globe today. Johannesburg can forge a new beginning.

2.1 Shrug off Copycat Development

Partly through imposition, partly through attraction, the Northern development model has shaped Southern desires, offering tangible examples not only of a different, but of a supposedly better life. After decolonization, the newly gained political independence notwithstanding, the South set its sights on the industrial style of life and moved to catch up with the richer countries. And after the fall of communism, countries in Eastern Europe and Central Asia jumped to embrace capitalism and the glittery products of the free market. The winner takes all – including imagination. Where countries want to go, what they thrive to become, has most often not emerged naturally from their respective history and traditions, but has been forged by emulation of the Northern model. In this way, dignity has been identified with becoming modern, and international equity has been conceived as catching up with the developed countries.

The times of copycat development are over. Not because emulation of the North has not produced the desired results, but because the development model of the North is historically obsolete. Until the environmental crisis broke out, one could still attribute a certain degree of superiority to the technological civilization, which had emerged on both sides of the Northern Atlantic in the last quarter of the 20th Century. But it has become obvious that many of its glorious achievements are actually optical illusions in disguise. They essentially consist in transferring power from nature to man, leaving nature degraded and depleted in the process. As a consequence, natural systems, which serve as sources (water, timber, oil, minerals etc.), sites (land for mines, settle-

ments, infrastructure), and sinks (soils, oceans, atmosphere) for economic development, are disrupted or seriously degraded. Consider the environmental trends of the last fifty years: greenhouse gas concentrations have surpassed tolerable levels, one third of arable land has been degraded worldwide, just as one third of tropical forests, one fourth of the available freshwater, and one fourth of the fish reserves have disappeared, not to mention the extinction of plant and animal species. Although it was just a minority of the world population, which fed off nature for just a couple of generations, the feast is quickly coming to an end.

A dramatic situation has now emerged. At present, the world consumes more resources than nature can regenerate. Calculations suggest that human activities have exceeded the biosphere's capacity since the mid-1970s. Since then, ecological overshoot has become the distinguishing mark of human history. In 1997, the overshoot amounted to 30% of the Earth's carrying capacity, or even to 40-50% if the needs of other living beings are taken into account (WWF 2000). A large part of this overshoot is due to the extravagant use of fossil fuels, whose carbon waste would require a vast bio-productive surface area as a natural sink. Indeed, the global fossil fuel bonanza is mainly responsible for the quandary of conventional development, which presently only offers the uncomfortable choice between social injustice and biospherical disruption. If, for instance, the present average carbon emissions per capita in the industrial world were extrapolated to all countries, the atmosphere would have to absorb five times more emis-

The development model of the North is historically obsolete.

sions than it can take – without even counting the expected increase in population. In other words, if all the countries of the globe followed the industrial model, five planets would be required to provide the carbon sinks needed by economic development. As humanity is left with just one, such an equity approach would become the mother of all disasters.

Consequently, there is no escape from the conclusion that the world's growing population cannot attain a Western standard of living by following conventional paths to development. The resources required are too vast, too expensive, and too damaging to local and global ecosystems. Indeed, UNDP's *1998 Human Development Report* emphasizes that "poor countries have to accelerate their consumption growth, but they must not follow the road taken by the rich and rapidly growing economies in the past half a century." However, while this is definitely good advice, it fails to highlight the window of opportunity which lays wide open for many countries of the Southern hemisphere. Probably as never before in history, there is an opportunity to transform "under-

development" into a blessing. At the historical juncture where fossil-fuel dependency drives industrial societies into an impasse, economies that once were seen as lagging behind, suddenly find themselves in a favorable position. Not yet fully locked into an old-style model of industrialization, they have the prospect of leapfrogging into a post-fossil age, skipping the resource-intensive styles of production and consumption so dear to the industrial world. Thus the challenge they face is to choose a path that is both pro-environment and pro-poor. De-linking economic growth from an increase in resource use, and social progress from economic growth, can take them a long way into a sustainable future. In case of success, they could even reverse the usual master-student relationship, showing the North the way out of a self-defeating economic system. This window of opportunity, however, will close rather fast, if the South continues to stick to copycat development. It will only remain open if the South musters the courage to envisage models of wealth that are different from those in the North.

2.2 Reduce the Footprint of the Rich

Without ecology there will be no equity in the world. Otherwise, the biosphere will be thrown into turbulences. The insight that the globally available environmental space is finite, albeit within flexible boundaries, has added a new dimension to justice. The quest for greater justice has, for time immemorial, required to contain the use of power in society, but now it also requires to contain the use of nature. The powerful have to yield both political and environmental space to the powerless, if justice is to have a chance. It is for this reason that, after the age of environmental innocence, the question of nature is inherent to the question of power, just as the question of power is inherent to the question of nature.

Power determines who occupies how much of the environmental space. Neither all nations nor all citizens use equal shares. On the contrary, the environmental space is divided in a highly unfair manner. It still holds true that about 20% of the world population consume 70-80% of the world's resources. It is those 20% who eat 45% of all the meat and fish, consume 68% of all electricity, 84%

of all the paper, and own 87% of all the automobiles (UNDP 1998, page 2). Above all, it is the industrialized countries which tap into the heritage of nature to an excessive extent; they draw on the environment far beyond their national boundaries. Their ecological footprint is larger – and in some cases very much larger – than their own territories with a great deal of the resources and sinks they utilize, squandered from other countries. In fact, the OECD countries surpass (in terms of ecology and equity) the admissible average size of such a footprint by a magnitude of about 75-85%. The wealthy 25% of humanity occupy a footprint as large as the entire biologically productive surface area of the Earth (Wackernagel-Rees 1997).

However, especially when it comes to resource consumption, the conventional distinction between North and South is misleading. "North" and "South" are nothing else than "zombie categories" (U. Beck), i.e. concepts which clumsily survive in everyday speech despite the fact they do not reflect political realities. The classical juxtaposition of the G7 (plus Russia) and

The major rift appears to be between the globalised rich and the localized poor.

the G77 (plus China) still exists in international fora, but it fails to represent the political dynamics of the real world. The collective "South" comprises the most heterogeneous situations, ranging from the financial capital Singapore or the oil-rich Saudi-Arabia to the poverty-stricken Mali. As such, a common unifying interest is difficult to discern. The same is true for the North, though to a lesser degree. "North" and "South" are therefore mainly diplomatic artifacts.

Most importantly, though, the conventional North-South distinction obscures the fact that the dividing line in today's world, if there is any, is not primarily running between Northern and Southern societies, but right across all of these societies. The major rift appears to be between the globalised rich and the localized poor. The North-South divide, instead of separating nations, cuts through each society, albeit in different configurations. It separates the global consumer class on the one side, from the social majority outside the global circuits, on the other. This global middle class is made up of the majority of citizens in the North, along with a varying number of elites in the South, with about 80% of it found in North America, Western as well as Eastern Europe, and Japan. 20% of it can be found dispersed throughout the South. Its overall size equals roughly those 20% of the world population, which has direct access to an automobile. In the last decade, globalization has accelerated and intensified the integration of this class into the worldwide circuit of goods, communication and travel, most clearly so in newly industrializing countries and Eastern Europe/Russia. Transnational corporations largely cater to this class, just as they provide its symbolic means of expression, such as films, fashion, music, and brand names. But entire categories of people in the North, like the unemployed, the elderly and the competitively weak along with entire regions in the South find themselves excluded from the circuits of the world economy. In all countries, an invisible border separates the fast from the slow, the connected from the unconnected, the rich from the poor. There is a global North as there is a global South, encompassing even the area of the former eastern bloc. This reality thus disappears in the conventional terms of "North" and "South".

The corporate-driven consumer classes, in the North as well as in the South, have the power to bring the bulk of the world's marketed natural resources into their service. Due to their purchasing power, they are able to command the resource flows, which fuel their commodity-intensive patterns of production and

consumption. In attracting resources, their geographical reach is both global and national. On the global level, a network of resource flows, generally organized by transnational corporations, extends like a spider web across the planet, pulling energy and materials towards the high-consumption zones. On the national level, the urban-based middle classes succeed equally in capturing resources to their benefit, thanks to patterns of ownership, subsidies, and superior demand. Particularly in Southern countries, market demand for resource-intensive goods and services stems mainly from that often relatively small part of the population, which commands purchasing power and is therefore capable of imitating the consumption patterns of the North. As a consequence, the more affluent groups in countries such as Brazil, Mexico, India, China, or Russia use about as much energy and materials as their counterparts in the industrialized world, which, however, implies a level five to ten times higher than the average consumption in these countries.

Reduction of the ecological footprint of the consumer classes around the world is not just a matter of ecology, but also a matter of equity. Though trade in resources may help economically, it is deleterious ecologically since the excessive use of environmental space withdraws resources from the social majority in the world, constraining their capacity to enhance their lives and to move towards a brighter future. More so, wealth on the one side is at times co-responsible for poverty on the other. Time and again, the consumer classes shield themselves against environmental harm by leaving noise, dirt, and the ugliness of the industrial hinterland in front of the doorsteps of less advantaged groups. Moreover, resources are not simply out there waiting to be extracted; they often are where people reside and they are used by people to sustain their livelihoods. As the consumer class corners resources through the global reach of corporations, they contribute to the marginalization of that third of the world population, which derives their livelihood directly from free access to land, water, and forests. Certainly, such exports may increase a country's income, but it is not at all certain that the marginalized share in these benefits. In any case, building large dams and extracting ore, cutting trees and capitalizing agriculture for the benefit of distant consumers, often degrade the ecosystems upon which many people live. In fact, such expressions of development do often no more than deprive the poor of their resources in order for the rich to live beyond their means.

2.3 Ensure Livelihood Rights

In contrast to Rio, the Johannesburg Summit will concentrate on poverty eradication. The South may pin up the badge of poverty, demanding a greater share in the world economy. However, while the task is a noble one, its politics are ambivalent. There is certainly no doubt that the elimination of poverty calls for enormous efforts on the part of the international community. But it is questionable whether these efforts should primarily consist of higher development assistance, increased grants, or increased world market integration. For what is good for government, is not necessarily good for the poor. Much too often, and for quite some time now, the Southern governments, supported by their elites, have indulged in the expansion of their own consumer classes and have secured their own power base under the banner of poverty eradication. Against this background, it is clear that the struggle for poverty reduction will not be decided in controversies between Southern and Northern governments, but in conflicts between the marginalized majority and the global middle class – which includes domestic governments, corporations, and multilateral institutions. After all, it has happened more than once that Southern and Northern governments have achieved consensus at the expense of the poor. While everybody agrees that poverty elimination has to have its due priority, opinions are sharply divided as soon as the key question is asked: poverty eradication, yes, but by whom?

The first answer highlights the role of investors, transnational companies, and economic planners, emphasizing that the reduction of poverty will be the result of higher and broader economic growth. Since growth, in this view, is triggered by export to urban, or better, foreign markets, the most important ingredients of a poverty reduction strategy are capital investments, factories, irrigation systems, transportation networks, and marketing outlets. Moreover, greater purchasing power cannot be mobilized unless free access to Northern consumer markets is secured. In this perspective, only the integration of the most productive agricultural sectors into the world market can provide a steady flow of income and investment, which in turn may stimulate further growth. In brief, poverty would be overcome through more globalization. Environmental issues, by the way, play only a minor role in export-led poverty reduction strategies. On the contrary, over-emphasis regarding pesticides,

pollution, clear cutting, or genetically modified crops is portrayed as an obstacle to development. However, sustainable trade may rise in importance as soon as there is sufficient demand from consumers for commodities like certified timber or organic produce. It is our impression that export-led poverty reduction is broadly the approach favored by South Africa and the recently formed New Partnership for Africa's Development (NEPAD).

The second response – which we favor – looks to the poor themselves and recognizes them as actors who shape their lives even under conditions of hardship and destitution. In this view, poverty derives from a deficit of power rather than a lack of money. Far from being needy persons awaiting provisions, the poor must be seen as citizens who are constrained by a lack of rights, entitlements, salaries, and political leverage. Any attempt, therefore, to mitigate poverty will have to be centered on a reinforcement of rights and opportunities. This is in particular true for women who are often legally marginalized. In many places, they have no access to tenure, income and influence, despite the fact that they carry most of the burden of everyday life and often have to sustain families by themselves. For women or men, a basic rights strategy, rather than a basic needs strategy may help to overcome the constraints to self-organization. In the countryside, conflicts will often turn around rights to land, access to water, forests, and undestroyed habitats, confronting land owners and state administrations. In the city, conflicts will focus on rights to housing, to unpolluted water, to running a business, or to self-administration, confronting city officials, health departments, police, or power cliques. Unless there are shifts in power patterns, subtle ones or sweeping ones, the poor will almost always lack the security and the resources needed for a decent existence. Boosting economic growth is less important than securing livelihoods for the impoverished. Since economic growth often fails to trickle down, there is no point in sacrificing people's lives in the present for speculative gains in the future. Instead, it is crucial to empower them for a dignified life here and now.

However, such a livelihood-centered perspective is at odds with the export-led poverty reduction strategies. There is convincing evidence that export-led poverty reduction may help investors, agricultural

Poverty derives from a deficit of power rather than a lack of money.

companies, and wealthy farmers improve their own prosperity, yet large parts of the rural population are likely to suffer massive displacement from small farms, loss of livelihoods, and forced migration to cities. Furthermore, a strategy of creating industrial jobs, which under the condition of a borderless economy would have to be competitive on the world market, is soon likely to run out of breath. Such jobs require considerable capital investment, which makes them expand at a much slower pace than the number of unemployed. At any rate, under a free trade regime, agriculture and industry in most countries of the South cannot be simultaneously competitive and job-intensive. The politics of world market integration is therefore anything but hospitable to a quickly expanding number of citizens. It renders many people redundant with respect to the official economy.

To avoid this impasse, it is important to promote sustainable livelihoods. Sustainable in both senses of the word: firstly, an activity that provides a decent income or sustenance and provides some status in society along with a meaningful life; and secondly, an

activity which conserves and, if possible, regenerates the environment. Productive ecosystems are core assets for sustainable livelihoods, since grasslands, forests, fields, and rivers can be valuable sources of sustenance. This is the main reason why livelihood-centered strategies of poverty removal coincide with the interest in environmental protection. Ecology is thus essential for ensuring decent livelihoods in society. Securing community rights to natural resources is therefore a hallmark of livelihood politics. However, strengthening the rights of local communities means weakening the claims of distant income earners and consumers. Thus the direct or indirect demand of the corporate-driven middle classes for easily available and cheap resources will have to be checked since the interest of middle classes in expanding consumption and of corporations in profit expansion often collides with the interest of communities in securing their livelihoods. These resource conflicts will not be eased unless the economically well-off on the globe make the transition towards resource-light patterns of production and consumption.

2.4 Leapfrog into the Solar Age

At the time of Rio, sustainable development was mainly about protecting nature, but now, in the wake of Johannesburg, it is first and foremost about protecting people. For nobody can close his or her eyes in front of what can be called the 21st century challenge, namely how best to extend hospitality to twice the number of people on the globe, in light of a rapidly deteriorating biosphere? Indeed, the historical pattern of scarcity, which had left its imprint to economic development and continues to shape it, today is outdated. While in the old days the world appeared full of nature, but void of people, today the world is void of nature, but full of people. The satisfaction of needs and wants is not constrained so much by the paucity of hands and brains, but by the scarcity of resources and living systems. Nature is now more of a limiting factor than money, given that development is more and more restricted not by the number of fishing boats, but by the decreasing numbers of fish; not by the power of pumps, but by the depletion of aquifers; not by the number of chainsaws but by the disappearance of primary forests. In particular for

Southern countries, the relevant question will be: How many problems can be simultaneously solved or avoided? How can both the abundance of people and the scarcity of nature be addressed by making the right initial choices?

The answer, we suggest, is to quickly move out of an industrial economy wasteful of both nature and population, and head for a regenerative economy mindful of resources and in need of people. An economy that is based on the assumption that there are "free goods" in the world – pure water, clean air, hydrocarbon combustion, virgin forests, veins of minerals – will favor large-scale, energy- and material-intensive production methods, and labor will remain marginalized. In contrast, if an economy discourages profligate resource use and privileges non-fossil resources, a decentralized and smaller-scale production pattern requiring more labor and intelligence is likely to prosper. In both North and South, the potential for higher resource productivity presents business and governments with an alternative scenario: making radical reductions in resource

use, while at the same time raising rates of employment. Rather than laying off people, greater gains can come from laying off wasted kilowatt-hours, barrels of oil, and pulp from old-growth forests. People will in part have to substitute for natural resources; such an economy, evolving with a minimum input of nature, will have to rely much more on the strength, the skill, and the knowledge of people. Indeed, it will be post-industrial in the true sense of the word: finding new balances between hardware, biological productivity, and human intelligence.

This is even more true when it comes to changing the resource base altogether, from fossil-based to solar-based energies and materials. Apart from the obvious environmental benefits, the point here is that fossil resources usually imply long supply chains, which in turn imply long chains of value creation. Because there is usually so much geographical distance between the extraction of the resource and its final use, including a variety of intermediate steps of processing and refining, opportunities for profit and employment are spread out as well. Most countries and localities, finding themselves at the downstream end of the chain, are strangled by the high cost of fuel and resources imported from abroad. They pay, but most gains and jobs arise elsewhere. However, a change in resource base would turn this logic around. Reliance on photo-voltaic, wind, small hydro power, and biomass of all sorts implies much shorter supply chains, not just for the resource, but often also for the conversion technology involved. As a result, income and jobs would largely stay at the local/regional level, recycling money in local economies. Furthermore, as sunshine and biomass are geographically diffused, they lend themselves to decentralized structures of production and use, unlike fossil resources which are concentrated in a few places, giving rise to centralized large-scale structures. The industrial pattern of squandering nature instead of cherishing people would be reversed; a solar economy holds the prospect of both including people and saving resources.

Southern countries have the opportunity to leapfrog into a solar economy, much before and much more solidly than Northern economies. In fact, it would be self-defeating for them, in terms of livelihoods and in terms of the environment, to go through the same stages of industrial evolution as the Northern countries did. For instance, Southern countries face important decisions about introducing infrastructures such as energy, transport, sewage, and communication systems, the introduction and mainte-

nance of which, in industrial countries, have caused the earth's resources to dwindle. Today, many Southern countries are still in a position to avoid this unsustainable course, opting without further delay for infrastructures which would allow them to embark on a low emission and resource-light trajectory. This is equally the case for "transition" countries, where it is often preferable to build new infrastructure systems rather than upgrading the aging ones. Investment in infrastructure such as light rail systems, decentralized energy production, public transport, grey-water sewage, locally adapted housing, regionalized food systems, transport-light urban settings etc., could set a country on the road towards cleaner, less costly, and more equitable development patterns. This perspective holds true in many respects; in addition, it represents a unique chance for achieving greater economic independence, decades after political independence has been accomplished. Southern or Eastern countries that ignore leapfrogging into the solar age do so at the risk of missing out on an unique opportunity.

The Johannesburg Agenda

- Fixation on the historically obsolete development model of the North as if the crisis of nature did not exist means sliding back behind Rio and a disservice to the South since equity can no longer be separated from ecology.
- The conventional distinctions between North and South are misleading – these are diplomatic artifacts. Instead, the real global divide runs through each society – between the globalized rich and the localized poor.
- Excessive use of environmental space withdraws resources from the world's marginalized majority. Fairness demands reducing the ecological footprint of the consumer classes in North and South.
- Poverty is a lack of power rather than of money. Reinforcing rights of the poor is the condition of poverty removal.
- Leapfrogging into the solar age is a chance to turn "underdevelopment" into a blessing. A solar economy holds the prospect for including people and saving resources.



Part 3

Livelihood Rights

The politics of poverty eradication is replete with misconceptions. Popular myths include the suggestion that (a) the poor cause environmental destruction, that (b) economic growth removes poverty, and thus (c) economic growth is the recipe for the elimination of both poverty and environmental degradation. We believe that each link in this chain of arguments is flawed, making policies that are based on it counterproductive.

Admittedly, the poor environmental refugees are often pushed to deforesting and overgrazing land, but in general, they have proven to be careful guardians of resources and ecosystems. Since the poor depend on soil fertility, fish from lakes and estuaries, plants for medicine, branches from forests, and animals for subsistence and cash, they have a very down-to-earth incentive for conserving their resource base.

The argument about economic growth requires clarification as well. Only growth which increases the Gross Nature Product (to use a distinction made by the late Anil Agarwal), and not just the Gross National Product, enhances the condition of rural communities. Otherwise, growth will produce the opposite effect – loss of income and livelihood capacity. It is not monetary growth as such that is important, but the structuring of economic activities in a way that foster the preservation of ecosystems, as well as the cohesion of communities. Economic growth for its own sake is self-defeating, unless it fully takes into account renewable energy, sustainable agriculture, water conservation, biomass-based enterprises, and the prudent use of living systems. Any degradation of the environment increases the plight of the poor, just as any improvement will reduce their vulnerability. Ecology and equity are integral to any livelihood strategy.

3.1. Biodiversity and Livelihood

Agriculture is a way of life. Local communities all over the world strive to live sustainably and meaningfully. They seek survival and livelihood, as well as joy and celebration in their surrounding nature. In fact, the lives of these communities are shaped by the fauna and flora of the specific environment in which they live. Food habits and house designs, clothing and music instruments, work patterns and feasts, all reflect the community of plants and animals that surround them. While conservation of biodiversity has been enshrined as an official objective of international politics in treaties such as the Convention on Biological Diversity (CBD), little attention has been paid to the role that biodiversity plays in the productive and cultural life of rural and coastal communities. Since these communities have been – and still are – dependent on their specific bio-diverse environment, the need for conservation has often become integral to their culture and daily practices. Villagers who are generally aware that the continuing productivity of nature sustains their lives, are likely not to take more than nature can regenerate. In particular, the use of common property resources, such as fisheries or forests, is often governed by customary rules, which are designed in a way to preserve carrying capacity.

Livelihood Security and Biodiversity

There is no food security without farmer security, and that in turn is linked to the maintenance of biodiversity. Maintenance of biodiversity and enhancement of genetic resources has been carried out by farming communities, particularly women, all over the world, wherever localized food production prevails. Indeed, women play a pivotal role in both maintaining and strategically using biodiversity. Besides being managers and providers of food in the families, they are also carriers of local knowledge, skills for survival, and cultural memory.

Most poor people do not own any land, but rely on common property resources – forests, lakes or even roadside areas, which are owned by the community or the state – as vital means of survival. In a study conducted in India in 1991, it was found that 80% of fuel and fodder that the poor use come from common property land. In terms of income, it accounts for 20% of their income. In Africa, rural households derive 35% of their energy needs from fuel wood –

most of it collected from forests and common property lands. Free access to grassland, trees and water-courses is essential for the sustenance of these households. Obviously, any degradation of these ecosystems, be it through pollution, overgrazing or logging, would increase the daily workload and would eventually prove fatal.

It is particularly important in this context, that the sustainable livelihoods of many rural families are dependent not just on cultivated crops, but on food harvested from uncultivated sources. For instance, in early morning hours, it is a common sight in the rural parts of Asia and Africa, to see people collecting leaves, spinach, small fish or fruits from the area around the homestead. These people go to the roadsides, the paddy fields owned by others, the ponds, near the canals, and other common land of the village. They also know that children who have gone for a swim in the pond, the canal or the river, will come back with their hands full of uncultivated green vegetables, tubers, edible forest fruits and most importantly, fish, which will be immediately turned into food for the family. The fish they like and eat most often are 'uncultivated' fish, collected from water bodies. According to a UBINIG study (2000), at least 40 percent of the food by weight, and most of the nutritional requirement for the rural population of Bangladesh, is met by terrestrial or aquatic sources of food, that are not cultivated.

Furthermore, the livelihood of the poor, especially of women, depends on the integration of farming, livestock, poultry and fisheries. In a way, rural families comprise not only the extended human family, but also include domestic animals, such as cows, goats, sheep, chicken, ducks and pigeons. Mixed cropped fields provide much of the partner plants, which are sources of nutrition for chicken and cows. Roadside plants provide feed for goats. Children gather snails and other aquatic species for feeding the ducks raised by women. A large majority of rural poor women survive on raising cows, goats, sheep, ducks, chicken and pigs, whose feed is not purchased, but taken from surrounding fields and common property. While these animals get their feed from the diverse species available on the land, the animals and birds in turn reciprocate sustaining the environment and enhancing biodiversity.

A single-crop mentality, which is often reflected in industrial agriculture, fails to appreciate the

numerous interconnections between people, plants and animals. Adamant on optimizing the yield of one particular crop, agronomists tend to overlook the importance for people's livelihood, of the wide range of subsidiary cultivated or uncultivated crops. This is one of the reasons why increased yields from monocultures do not necessarily translate into more food for peasants. On the contrary, they might have less food, as subsidiary crops are eliminated. Moreover, the side effects of chemical agriculture often affect the diversity of crops and animals. If land and water are polluted, they become like poison for people who gather food, or animals and birds that feed on them. Frequently, chemical residues contaminate freshwater springs, fish and aquatic resources, or uncultivated biomass. Therefore, the claim that modern agriculture has produced more food is fallacious since it is based on the calculation of single plant harvests, for instance rice, systematically ignoring its negative effect on the entire food system, that includes fish, livestock, and uncultivated sources.

Women and Seed Preservation

Women are the guardians of biodiversity, as they are often in charge of the selection and preservation of seeds. As they choose, save, sort out, and sow the seeds of vegetables, fruits and many other crops, they play a role, which is crucial to the enhancement of genetic resources and biodiversity. Additionally, the general practice of sharing seeds among neighbors and relatives enhances biodiversity and genetic variety. The varieties of vegetables ensure food security in

terms of availability in different areas and in different seasons of the year. For instance, in the Nayakrishi Seed Wealth Center in Bangladesh, farming women deposit their collection of seeds. The center collects local seeds with a view to adopting and improving production techniques suitable for farmers' seed. Thus, hundreds of local varieties of rice, vegetables, fruit and timber crops have been reintroduced within a short period of time. For example, farmers in the Nayakrishi area cultivate at least 1027 varieties of rice, a number that is steadily increasing. In a country where over 15,000 rice varieties had been reduced in two decades to about 8 or 10, this represents a reversal in the trend of genetic erosion. As farmers exchange seeds among themselves, they help to increase the genetic resource base of their community.

Peasant women in Nayakrishi have started to build their "veez-sampad" or "seed-wealth". This notion is deliberately opposed to concepts like seed-banks or gene-banks. These women claim the right of control over seeds; therefore, they resent any centralization of seed wealth in the form of a "bank". Control over seeds, on the household and community level, is an important underpinning of the economic independence of farmers. It gives security, shields against money expenses, and provides a heritage around which social relations are interwoven. Farmers become more vulnerable, when they lose control over seeds. For this reason, the right of farmers to their seeds, including the right to use seeds for breeding new varieties, has to be protected against the attempt of corporations to turn the vital need of sowing into a solvent demand for their products.

3.2. Land, Water, and Livelihood

Land degradation, just as limited access to land, is a key factor of rural poverty. As the soil fertility declines, so does agricultural productivity, which must in turn be compensated for by costly fertilizers. This decline is often compounded by a lack of water, which then causes soil salinization or soil erosion. For these reasons, the degradation of land and water resources undermines the livelihood of small farmers. Affected farmers are often caught in a downward spiral of declining agricultural productivity, less subsistence, and flight from the villages. Indeed, the

rising phenomenon of environmental refugees is often closely linked to the deterioration of land. And in West Africa, those children who demonstrated growth abnormalities associated with poor nutrition, were most frequently found in areas of high soil degradation. It is estimated that up to one billion people are affected by soil erosion and land degradation due to deforestation, over-grazing and agriculture (DFID 2002). Any attempt to overcome rural misery and to ensure livelihood rights, will have to focus on the restoration of soil fertility and water resources.

Soil Fertility through Organic Agriculture

Over thousands of years of history, farming communities have learned various biological and physical methods for coping with decreasing productivity of agro-ecosystems, like for instance terracing or fallowing. Perhaps the most significant are those that make conscious use of species to counter the slow natural decline of any agro-ecological system. For example, mixed farming combining crop and animal production, provides for manure, which makes nutrients optimally available at the start of the growing season. Moreover, it makes it possible to put nutrients exactly where they are most needed.

The use of human waste as manure also helps reduce organic matter and nutrient leakage from the fields. And deep-rooted crops are planted to bring leached nutrients up to the surface soil, in order to become available for the next generation crop. In Africa, for instance, sorghum and similar crop species are rooted deep in the earth, bringing nutrients up to the surface. They also withstand dry spells in the weather cycle, which are often exacerbated by deforesting the land. These and similar species slow down growth to survive water logging, while rice grows plentiful under waterlogged conditions. Such methods keep the humus content of the soil high, and provide for stable fertility.

Strategies like mixed cropping, animal raising, terracing, and afforestation are widely employed to halt degradation of soils and to restore the productive power of the land. Various forms of low-input, ecological agriculture are practiced, not only because they require less capital, but because they conserve the soil – along with water, the basis of all livelihood. However, quite a number of these initiatives are not grounded in a 'production' paradigm that aims to optimize the production of crop yield for economic gain. They are rather efforts by communities to generate and regenerate their ecological 'relations' to plants, water, and animals for food, livelihood, and also spiritual connection. Such communities are not interested in competing with urban centers to acquire more cars, refrigerators, or high rise buildings. They derive their dignity from stable livelihoods and good relations with their fellow beings in community and nature.

Water through Ecological Restoration

Water is the essential element not only for growing crops and raising animals, but also for peoples'

sustenance. Yet water scarcity is widespread. In many rural areas, water tables are receding, wells are contaminated and ever less run-off is kept available. Competing claims on water resources by irrigation and industry, often favor the more powerful, leaving the less powerful thirsty. In addition, time-honored technologies, such as village tanks or canals, have been abandoned, just as community water regimes have eroded. Expanding water supplies often aggravates the problem. Therefore, water conservation and the restoration of grazing, farming and forestry to increase water collection, are today the priority for livelihood politics around the globe. Initiatives for the prudent use of water abound. They range from the revival of water harvesting techniques, to small storage dams and comprehensive watershed programs. Efforts to increase collection, however, usually imply the long-term regeneration of living systems through which the water cycle can pass. Healthy grasslands, farm lands, wetlands, and woodlands are the best insurance against water scarcity. Therefore, ecological restoration for the sake of water security is essential to ensuring one of the most basic livelihood rights – the right to water.

Erosion of Livelihoods through Industrial Agriculture

Industrial agriculture tries to produce a homogenous environment irrespective of the distinct nature of the pre-existing ecosystem. Therefore, it uses irrigation extensively. It thus creates a captive market for pumping and irrigation equipment. It also creates contracts for building dams, and irrigation and drainage canals. In this way, it geographically extends the age-old problems associated with irrigation whereby water is diverted from the weaker to the stronger. Furthermore, it divorces animal production from crop production. It plants single variety monocultures as a continuum over very extensive areas. Ecosystem disruption thus becomes inevitable. Increased vulnerability of crops to diseases and pests ensues. One indicator of such a disruption is the regular and quick collapse of the crop varieties, owing to emerging vulnerabilities to diseases and pests. It also gives chemical companies that produce and supply pesticides and herbicides a captive market.

During the Green Revolution, for instance, fertile land was flooded with chemicals and poisons, which included insecticides, fungicides, herbicides, etc. As a result, poisonous residues entered the environment, at

both the surface and in groundwaters. Both the breeders and the suppliers of agrochemicals are increasingly the same North-based transnational corporations. Combining both sectors facilitates the breeding of varieties which require agrochemicals. And to enable corporations to dictate how farmers use the seed and agrochemicals, they patent both. By so doing, they marginalize community breeders, who maximize diversity, and have thus enriched humanity with the various crops and thousands of varieties of

each crop, as well as the ecological methods of using diversity to forestall diseases and pests. This is the way globalization affects farming community agriculture. The proven sustainable land use practices by local communities and in particular farmers, have to be protected from the privatization of their knowledge, technologies, practices and biodiversity, and in particular seeds, and from the pressures to accept the use of agrochemicals.

3.3. Energy and Livelihoods

Over the last fifty years, economic policies in many Southern countries have been based on the premise that the rural economy will grow by piggy-backing on the growth of the urban/industrial economy. In other words, it will automatically benefit from the “trickling down” effect that results from overall national progress. The main thrust has been to invest primarily in industry – both heavy and light, but always big – and urban infrastructure, i.e. those sectors which are assumed to provide higher returns than investments in small, decentralized initiatives. At every step, more energy is consumed, and more entropy is created. Instead, for creating sustainable livelihoods, massive decentralized private and non-profit sector initiatives are required. The objective is to produce goods and services for the local, low-purchasing power market. In small-scale sustainable enterprises, the capital cost of creating one workplace is much lower than in the industrial sector, just as returns on investment can be higher. Such sustainable enterprises will have to be more decentralized, efficient and responsive to social and natural constraints, than industry is today. Otherwise, they are not able to do what is necessary, namely to create work places at a fraction of the cost of those created in the globalized economy and to increase the productivity of energy and material resource use by at least 10 times compared to today’s level.

Sustainable enterprises are decentralized. They are technology-based mini-businesses that are environmentally sound and produce for the local market. Their primary problem is their need of certain kinds of support tools such as technology, managerial skill, marketing methods and access to credit and financing

to be profitable and sustainable. Availability of these is today highly facilitated by Internet. An appropriate portal can provide rural consultancy and monitoring, an exchange service, and a range of information sources. This, of course, is not limited to enterprises. Also villagers will be able to get information about commodity prices, land records, or in fact matrimonials. They can shop for inputs such as seeds, machinery, spare parts and household items. Such an information network can give a boost to the dissemination of renewable energy technologies by giving a powerful tool to small enterprises and villagers alike.

Jobs and Nature Protection through Renewables

Energy policies are usually conceptualized and designed by those who control the “modern” sector – the elites for whom commercial (i.e. non-renewable, fossil based) fuels are the only acceptable, legitimate source of energy. In their view, it is taken for granted that development means growth, that growth means rising energy use, and that rising energy use means increasing energy supplies. Moreover, in this view, energy is identified with electricity, electricity with centralized grid systems, and national grids with petroleum- or coal-based energy production. Energy decisions, in the “modern” sector, are made primarily by economists and engineers who rarely take into account the needs of the marginalized majority. On the contrary, the expert elite goes for hydro-electric projects and nuclear power plants, just like fossil fuel based power stations, because such technologies are of a grand scale and offer formidable opportunities

Renewable energies will have to be part and parcel of any strategy to ensure long-term livelihoods.

for investors and engineers. Small wonder that countries are plastered with big plants. The installed capacity for generating electricity usually serves energy-hungry industries and towns, along with large farming interests.

The poor, however, have to be satisfied with what are euphemistically called “non-commercial” energy sources, such as wood, cow-dung, twigs and agricultural wastes. In fact, non-commercial energy in many Southern countries constitutes nearly 50% of the total energy used. This is a trend that has continued over the decades, and given the present growth rates of different energy sources, can be expected to continue into the future. Yet, non-commercial energy use puts heavy pressure on bushlands and forests since people who are short of cash take advantage of freely available branches and trees. The lack of commercial or affordable energy often leads to the degradation of the natural heritage. This spells gradual and silent disaster, given the fact that more than two billion people in the world are without access to electricity or basic energy services. For both social reasons – job creation and better living conditions – and environmental reasons – protection of the climate globally, protection of living systems locally – renewable energies will have to be part and parcel of any strategy to ensure long-term livelihoods.

Despite sizable investments made by governments, international agencies and even some corporations, the diffusion of commercial sources of renewable energy has a long way to go. A few isolated successes have been reported with solar photo-voltaic systems for use in pumping, lighting, community TV and other special applications, primarily in remote locations, which are too expensive to wire up to the national grid. Since many bulk applications of energy (such as cooking, water heating and space warming) need only a low grade energy source, it makes good sense to make solar thermal devices available to households on a large scale. Some countries have had some success with improved cooking stoves, solar water heaters and similar devices, but the usual experience is that demand dries up the moment that subsidies for popularizing them are withdrawn.

Next to power production and transport, construction is the sector that consumes the highest amount of energy. A great deal of energy is embodied in building materials, such as cement, steel and bricks. Energy is also needed during operating time for lighting, heating and cooling. Since current manufacturing practices in most countries are quite ineffi-

cient, there is a lot of room for improving energy efficiency in the manufacture and delivery of building materials. For example, constructing houses in a village with unfired mud blocks instead of bricks can save several hectares of forests, that would otherwise be used as fuel. In addition, major energy savings can be achieved through the use of solar passive systems for heating and cooling buildings. Apart from a few isolated architectural experiments, though, not much has been achieved in this area so far.

Biomass is another form of solar energy conversion, and the most common in Southern countries. Large quantities of biomass are burnt for cooking and heating, while a small amount is converted to methane gas by an anaerobic digestion, or to producer gas by pyrolysis. This area offers great benefits; it constitutes a decentralized, low-cash, but huge market, which could become an arena for small-scale sustainable enterprises. Furthermore, many countries and regions have meteorological conditions that favor the use of wind energy and mini-hydro, two technologies of great promise. Unfortunately, the economics of commercially available designs in these areas is not yet sufficiently attractive to scale up this technology.

Initiating the Energy Transition

The first step in initiating the energy transition is to introduce technologies and systems that are less wasteful of energy. Many such solutions already exist and are technically and economically quite simple and straightforward to introduce. Measures to conserve energy range from technical interventions to reduce frictional losses, all the way to matching the quality of energy to the types of use to which it is put. Much of the technology needed to achieve this step is already available, but policies and fiscal incentives will be needed to accelerate the process.

The second step is to reduce our dependence on fossil fuels and nuclear energy. These are major threats to sustainability, both as limited resources and as limited sinks for waste products. It is fairly obvious that a switch to more accessible, more benign, and more sustainable forms of energy must be elevated high on the political agenda. While renewable energy is not without its environmental problems, it does offer numerous advantages over fossil fuels. But there will be no greater use of renewable energy, unless quite fundamental changes in fiscal and technological policies, pricing systems, subsidies and procurement

procedures occur. More so, it will also require significant investments in R&D, marketing systems and infrastructure, involving actors in government, corporations and the research community.

The third step is to redesign production systems, transport networks, various infrastructures and houses that optimize energy savings. These measures will invariably present more significant societal impacts and will be more difficult retrofit into existing production systems. Huge increases in energy efficiency and resource productivity in general, are possible by transforming industrial processes, re-

designing cities and transportation systems and by substituting physical movement with electronic transmission.

The fourth step, with the deepest and longest lasting impact, has to do with changes in lifestyles, in the concepts of consumption and production, and in the understanding of individual and social purpose. Given the market and other forces at work, such a transition will not be easy to achieve and will involve all actors in society from the individual to the community, through the institutions of learning and faith, to the machineries of global governance.

3.4 Urban Livelihoods

Nowhere is the wealth gap greater than in the cities of the world. The well-off and the destitute, the mobile jet-setter and the immobile slum dweller, the super-consumer and the zero-consumer, all reside in one and the same urban habitat of a size rarely larger than a hundred square miles. Yet they live worlds apart. Both the affluent and the dispossessed are growing in numbers, but they have little in common. Golf courses stretch out not far from factories, business districts thrive next to street markets, and affluent neighborhoods co-exist with slums. Disparity reigns, and more and more urban centers exhibit the traits of a divided city. Invisible barriers separate the rich from the poor; and it is entirely possible for well-to-do residents to spend years without ever coming into visual contact with the less palatable sections of their city.

Primarily the absence of modern agrarian reform in many Southern countries has led to constant migration processes from the countryside to the cities. Concentration of land tenure in rural areas is an important motive for migration to urban centers. However, urban infrastructure and settlement policies have been incapable of dealing satisfactorily with the requirements for shelter, water supply, appropriate sewage system, environmentally sound transport systems, etc. This has been compounded by the fact that, thanks to the forces of economic globalization, corporations have gained greater freedom to choose where to locate their activities. As local governments compete with industry, socially and environmentally destructive tendencies have been enhanced in many

cities, increasing urban poverty, social segregation, political violence and unequal risk distribution. It has been shown, for instance, that facilities producing toxic waste have usually been located in areas inhabited by concentrations of poor people and ethnic minorities.

Urban poverty, however, is different from rural poverty in one important respect. Non-monetary assets, such as clean air, water, shelter, or security are less available in urban than in rural areas. For over and above their poverty in money, the urban poor have to deal with contaminated water, dangerous housing, infected air, criminality, and long distances. Their private poverty is thus compounded by the absence of natural (and in part social) capital.

As in rural areas, the marginalized majorities in the cities as well suffer from environmental deprivation. However, while the rural poor are often deprived of access to natural resources, which could serve as their livelihood means, the urban dispossessed are threatened in their physical integrity by the degradation of their living space. They cannot rely on the availability of those services of nature they need by virtue of being biological creatures. Water may carry pollutants, air may affect the respiratory system, body excrements may lead to infections, or land may be unstable. In fact, environmental problems in cities of the South derive from shortage of water, from pathogens or pollutants in air, water or food, and from housing at unsuitable sites. About 220 million urban dwellers, 13% of the world's urban population, do not have access to safe drinking water, and about twice

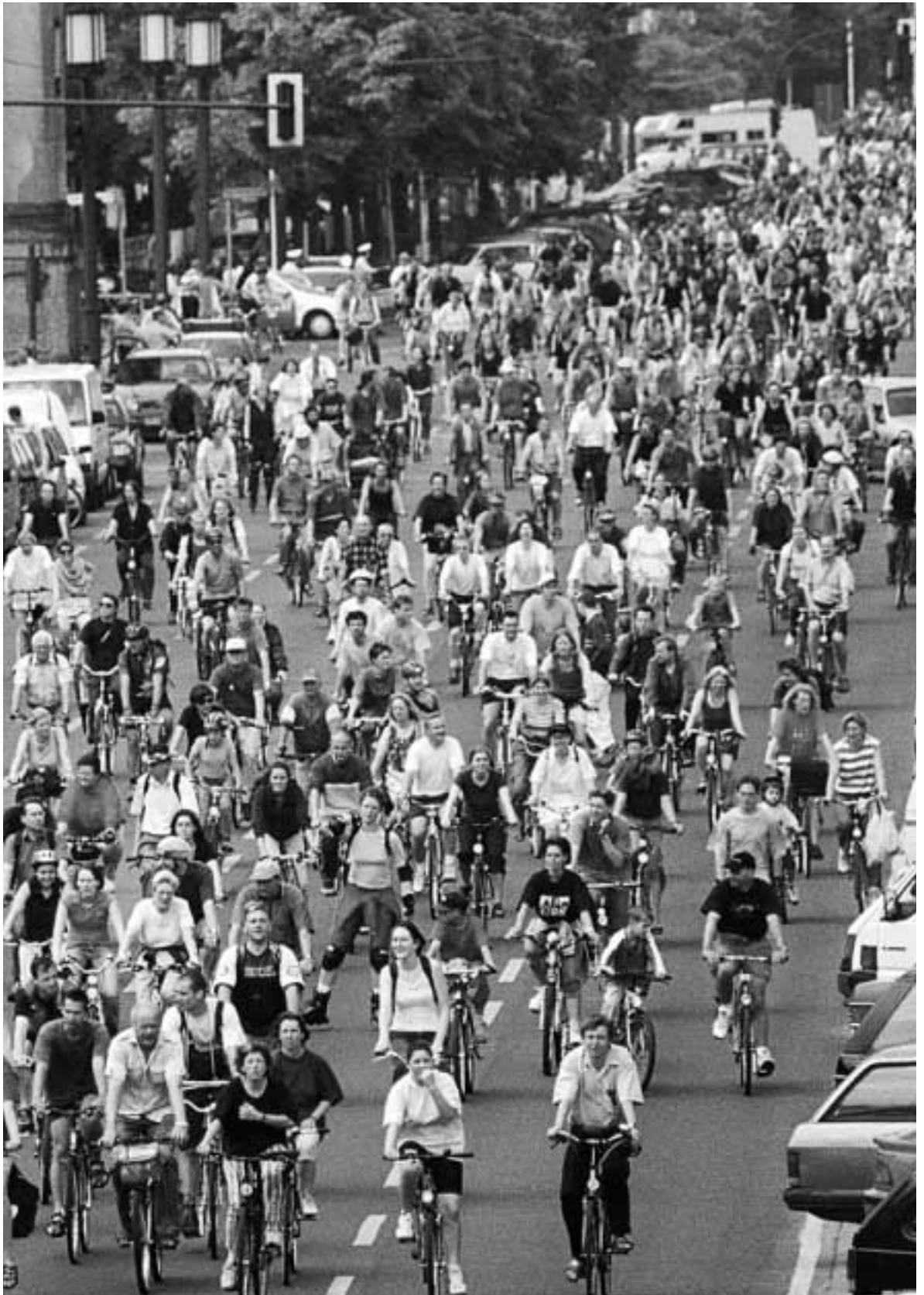
this number lack even the simplest of latrines. Sanitation for the removal of waste water is largely absent, as is the disposal of rubbish. Overcrowding in dense settlements facilitates the transmission of diseases. Moreover, air pollution is widespread in Southern cities, with choking an element of life in many inner city areas of Asia and Latin America. Water, even if available, may not be potable since contamination from human waste or from industrial sources is a frequent problem. And finally, even the land underneath one's feet is not secure. Informal settlements, often built on steep hills, are exposed to mudslides or floods. By and large, environmental problems in cities pose risks to the physical well-being of citizens. They threaten not only people's livelihoods, but people's health. Mediated through the environment, urban poverty is therefore closely linked to the wide spread of preventable diseases, such as diarrhoea, infections, and intoxication. It goes without saying that the disabling effects of illness exacerbate the condition of poverty, most notably for women, children, and infants.

To a certain degree, of course, the well-to-do are also affected by pollution. But in most urban areas of Asia, Africa and Latin America, it is low-income groups that bear most of the ill-health, injury or premature death, and other costs of degradation. They stand very little chance of obtaining healthy and legally secure living quarters with sufficient space, security of tenure, reliable services and facilities, and in areas that are not prone to flooding or landslides. More often than not, they are also forced their tight economic situation into making sacrifices with regard to environmental quality. It is not surprising, therefore, that there is generally a strong correlation between income level and exposure to environmental risks. On the other side, however, the marginalized majority contributes little to environmental degradation. Their per capita use of fossil fuel, water, land, and their production of waste as well as of greenhouse gases is far inferior to the levels maintained by middle- and high-income groups. The causes of pollution and land scarcity are rather to be found in the consumption patterns of the well-off, along with urban-based production and distribution systems that serve them. They win out over the economically weak in the competition over shares of the limited urban environmental space. The urban poor are not only marginalized economically, but also environmentally since they claim little of the resources, but have to bear the bulk of the waste.

Against this backdrop, it is clear that a minimum of environmental health is part and parcel of urban citizenship, since the already precarious situation for citizen's rights in many cities is aggravated by the environmental handicaps they have to live with. Freedom from physical threats, and safe living conditions, are definitely the foundations of a dignified existence as well as of civic and human rights. For this reason, both dimensions of the environmental struggle, the struggle to bring down the resource use of the affluent and the struggle to protect people against pollution, are essential for improving lives and livelihoods of the urban poor. There is no improvement, however, unless the marginalized make claims on the city, confronting more powerful, globally oriented groups. As they demand rights of tenure, protection against displacement, rights to exercise a business, or protection against profiteers, they must also demand the right to a healthy habitat. Environmental policy is thus part of the larger attempt to widen the political and economic space available to marginalized citizen. Essentially, it raises the same question which is at the core of urban conflicts: Whose city is it?

Livelihood Rights

- Make environmental protection an integral part of poverty mitigation. As clean water, fertile soils, fisheries and forests secure livelihoods and health of the poor, so are the communities, once in control, stewards of nature. Make equity an integral part of nature conservation.
- Food security is linked to farmer security is linked to biodiversity.
- Women are pivotal guardians of local knowledge, skills for survival, biodiversity and cultural memory.
- Go for organic agriculture to avoid soil degradation and erosion of livelihoods.
- Renewable energies ensure livelihoods. Without them, woodlands get depleted or climate change looms.
- In cities, contaminated water, infected air, and dangerous housing threaten people's health. Move against pollution to improve the lives of the poor.



Part 4

Fair Wealth

Poverty is the siamese twin of wealth. Both develop jointly and neither can be fully understood without reference to the other. Usually, the poor are conditioned by wealth, and the rich thrive on benefits drawn from the poor. Hence, in our perception, no calls for poverty eradication are credible unless they are accompanied by calls for the reform of wealth. However, chances are that the Johannesburg Summit might get caught up in this credibility trap. Many speakers might put the spotlight on the poor and their fate, action and assistance will be solemnly promised, but the collaboration of the rich in creating poverty is likely to remain in the shadow. Indeed, conventional development experts implicitly define equity as a problem of the poor. They highlight a lack of income, technologies or market access, and advocate remedies for raising the living standard of the poor. In short, they work at lifting the threshold – rather than lowering or modifying the roof. With the emergence of bio-physical constraints to economic growth, however, this approach turns out to be definitely one-sided – suggesting at this point that it was probably never adequate. In any case, the quest for fairness in a finite world means changing the rich in the first place, not the poor. Poverty alleviation, in other words, cannot be separated from wealth alleviation.

No other principle holds for sharing the global environmental space among the world's inhabitants than the egalitarian principle.

The concept of environmental space can help to illustrate the relationship between ecology and equity. With regard to ecology, human beings, along with other living beings, use the global heritage of nature for extracting resources, dumping wastes, and domesticating living systems. This globally available environmental space, however, is not infinite; it has (flexible) boundaries. These boundaries constitute constraints for human activities crossing beyond may provoke biospherical turbulences. Ecology, therefore, requires to keep the overall level of resource flows within the boundaries of the available environmental space. With regard to equity, however, the environmental space concept addresses the enormous inequality in resource use on a global scale. Not every country occupies an equal share of the environmental space; on the contrary the shares are of very disparate size. In the mid-nineties, for example, the average Japanese required about 45 tons of fuels, minerals, and metals annually, the average German 80 tons, and the average American 82 tons, while the average Chinese settled with 34 tons (and with 20 tons eight years before) (Bringezu 2002). For keeping the range of goods and services in each of these countries on offer these megatons of materials and energy have to be mobilized, at home and abroad. As indicated, the well-off on this globe occupy an excessive part of the environmental space. However, the more the boundaries of this space are put under stress, the more the distribution of the environmental space takes on a dramatic note, because a larger share on the one side implies a smaller share on the other. As a consequence, the well-off, by having cornered a disproportionately large part of the global environmental space to the advantage of just a minority of the world population, deprive the world's majority of the basis for greater prosperity. Bringing down the resource demands of the corporate-driven consumer world in North and South is therefore crucial in advancing both ecology and equity.

In the long run, we believe, that no other principle holds for sharing the global environmental space among the world's inhabitants than the egalitarian principle. It suggests that every inhabitant of the Earth basically enjoys an equal right to the natural heritage of the Earth. May it be in accordance to the present lifestyles or in accordance to economic achievements, any other way of conceptualizing the distribution of natural resources would only codify an excessive appropriation of sources and sinks by the

global North. Indeed, the affirmation of the egalitarian principle is primarily directed against the frivolous inequality which has come to dominate the relations among people with respect to nature. Although it circumscribes the presumption of the rich primarily it still does not equally imply a positive right i.e. an entitlement to maximize the use of nature on part of the less consuming world citizens. As any right, also the right to natural resources is limited by the right of everybody else. Given that the right to enjoy nature's essential services is everybody else's (including future generations and non-human beings), the boundaries of the available environmental space constrain the use of this right. While the over-consumers are not entitled to excessive appropriation, the under-consumers are not to catch up with the over-consumers. They may only move towards fair and ecologically harmless levels, keeping within the guardrails of bio-physical sustainability. Just as equity is a condition of sustainability, ecology is a condition of equity.

At any rate, very rough calculations suggest that the global North will need to bring down its overall use of the environmental space by a factor of 10, i.e. by 80-90%, during the coming fifty years (Factor 10 Club 1995). Otherwise it is difficult to see how global sustainability as well as fairness can be attained. From this angle, the key question of global sustainability can be rephrased: Will the consumer classes be capable and willing to live without the surplus of environmental space they occupy today? The question also underscores the specific character of transnational environmental justice. Acting in the spirit of justice does not require to deal with the other, but with oneself. It calls for fairness, rather than for self-sacrifice. It is a reincarnation of the time-honored golden rule of Kantian ethics that no action and/or institution should be based on principles that cannot be shared universally. Transnational environmental justice requires to transform (post-)industrial production and consumption patterns in a way that they could be universalized because overshooting the environmental space can certainly not be universalized across the globe. At its core, transnational environmental justice is not about redistribution, but about restraint.

There will be no equity unless the corporation-driven consumer classes in North and South becomes capable of living well at a drastically reduced level of resource demand. Such a transformation of wealth is the central challenge of sustainability. It means to

bring production and consumption patterns up to the age of ecological constraints and equity aspirations. There are several avenues for moving into this direction.

First, the search for radically increased resource productivity, i.e. the art of producing wealth with ever less resources, is the cornerstone for sustainable production and consumption patterns. Using resources more effectively has three significant benefits. It slows resource depletion at one end of the value chain, lowers pollution at the other end, and provides a basis to increase worldwide employment with meaningful jobs. A mix of technological and social innovations across all sectors can render even a comfortable style of living. More resource-light solar architecture, regional food markets, hydrogen engines, low-speed cars, recyclable appliances, low-meat gastronomy are, in fact, various other cases in point. Second, as a change in resource base is central to a transition, the material quality of things will change as well. Bio-mimicry aims at changing the material quality of processes and products by re-designing production systems on biological lines, enabling the constant reuse of materials in continuous

closed cycles, and often the elimination of toxicity. Examples like bio-plastic or wind power abound. Third, living systems can be restored. But it takes deliberate investment in forests, rivers, gardens, hill slopes, soils for restoring, sustaining and expanding the natural capital, so that the biosphere can produce more abundant ecosystem services and natural resources. River restoration, afforestation, low-input agriculture are all attempts in this direction. And fourth, an emphasis on real wealth can diminish the importance of goods for both the producer and the consumer. By shifting business strategies from the sale of hardware to the sale of services, companies can learn to make money without adding ever more objects to the world; they will sell results rather than things, satisfaction rather than engines, fans, or plastic. And last not least, people can revalue those forms of wealth which cannot be bought with a credit card: the enjoyment of quality, friendship, beauty. In any case, the times may not be far that people get rather unimpressed by corporate marketing of objects and sensations. In fact they could become relaxed enough to cherish well-being rather than well-having.

4.1. Retreating from the Atmospheric Commons

Ten years ago, the United Nations Framework Convention on Climate Change was a considerable achievement in vigilance, given that the threat of global warming had been shaping up over a period of a few years only. It had dawned upon the world that the thin layer of atmosphere enveloping the Earth had been turned into a dumping ground for combustion-generated gases, and that this dumping ground was about to flow over. Twenty years after the bestseller "Limits to Growth" placed finiteness of natural resources lying deep in the bowels of the earth into the limelight, the international community was forced to realize that actually the finiteness of natural sinks up in the air might be of more urgency. As it turned out, the limit was not the earth, but the sky. The Climate Convention offered a framework of how to keep mankind from overshooting this limit.

The Convention emphatically underscored the principle of equity: "The Parties should protect the climate system for the benefit of present and future

generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the Parties of the developed countries should take the lead in combating climate change and the adverse effects thereof." (Art. 3, 1). Only Northern countries are expected to assume reduction commitments and financial burdens, while Southern countries have just reporting duties. This unequal distribution of duties arises from the unequal responsibility of countries for climate change. As it happens, industrialized countries are responsible for the bulk of carbon dioxide emissions in the past and in the present. While about 83% of the rise in cumulative emissions since 1800 have been caused by them, they were responsible for 61.5% of global carbon dioxide emissions still in 1996, comprising, however, only 25% of the world population. The fact that a dramatic rise in emissions is presently occurring in newly industrializing countries does not basically change this picture.

The Double Face of the Kyoto Protocol

The stage of the Johannesburg Summit will hopefully be used for celebrating the completed ratification process of the Kyoto Protocol. After about a decade of tortuous negotiations, this will finally be a major achievement of the Rio process. For the first time, the international community – with the notable exception of the US – enters legally binding commitments to respond to emergent bio-physical limits to growth on such a scale. Institutional and legal mechanisms are now in place which enable governments to steer the global economy towards a different path. In other words, tools for collective action are ready now.

However, the ratification of the Kyoto Protocol is a success in process rather than in results. For the emissions of industrial countries show no sign of declining from their destructively high levels; even if all the commitments of the Protocol were fulfilled, it is dubious whether in the end there would be any real reduction of carbon emissions with respect to 1990. How to eat the cake and have it too, has been the concern of too many countries; their diplomats were charged to protect economic growth and not the climate. They were out to appear climate-friendly, yet at a minimum cost for the economy back home. Three strategies have been used for attaining a climate regime that pretends to show the way to a post-fossil economy, while still endearing the masters of the fossil economy.

First, the North assumes obligations, but then passes the buck to the South and East. “Geographical flexibility” is the notion which ties instruments such as emissions trading, joint implementation, and Clean Development Mechanism together. As under the Kyoto Protocol specified in Bonn and Marrakech in 2001, industrial countries are allowed to transfer mitigation actions largely to the South and East, leaving their own economies essentially untouched. The “polluter pays” principle has been turned into a “polluter buys his way out” principle. Decarbonization will not really take place in this manner, since the resource base of Northern economies is not being restructured.

Second, the North assumes obligations, but discharges them through the extension of carbon sinks. After Bonn, industrial economies can be shielded against change by shifting action to the enlargement of the Earth’s absorptive capacities. In other words, more forests rather than less emissions. According to the Bonn agreement, regrowing trees,

setting up plantations or a changed treatment of soils can replace energy conservation and the transition to renewables. This hardly helps the climate, not only because of the missing reform, but because measurements of storage capacity are scientifically hazardous. In the end, the complexity trap snaps shut, and any accountability drowns in confusion.

Third, the climate negotiations focus on regulating emissions and not on changing inputs. They mainly aim at containing the fall-out of carbon dioxide but fail to deal with the volume of carbon-intensive inputs in the first place. They seek to intervene downstream and not upstream in the production cycle. While emissions are measured and counted, monitored and managed, the fossil-intensive model of development as such remains largely unquestioned. Under the Convention, nobody can speak about limiting the exploration of new oil fields, about regulating energy corporations, about implementing standards for low-input automobiles, or even about launching campaigns to give a boost to solar-based technologies and practices. Its attention concentrates on effects instead of causes. It is for this reason that the discussion on climate policy is largely separated from the discussion on sustainable development. International climate policy is framed in a way that the rules and interests driving economic growth are not really put into discussion.

Climate Change and Livelihood Rights

So far, Southern governments, apart from the island states, have watched the conflict among Northern governments about the Kyoto Protocol like spectators. Insisting on the particular responsibility of the industrialized countries, they wait until the North gets its act together, showing interest only when some transfer of resources to the South is in the offing. They are mistaken to do so. It seems to have escaped their attention that climate protection is also of utmost importance for the dignity and survival of their own people. Far from being just a nature protection issue, climate change is likely to become an invisible hand behind agricultural decline, social disruption, and migration. True, the causes for climate turbulence are to be found mainly in the North, yet their destructive effects will mainly hit the South – not to mention a possible catastrophe like breakdown of the gulf stream. In fact, the innocent are going to be the victims, at least in relative terms. It is therefore high time that Southern governments stop indulging in the

Climate change is likely to become an invisible hand behind agricultural decline, social disruption, and migration.

warm feeling of good conscience and rise against this form of the 21st Century colonialism.

This time, colonial destruction will come without imperial powers and without occupying armies. Instead, it will come through the air, invisibly and insidiously, tele-transported through atmospheric chemistry. Once the Earth warms up, nature destabilizes. Suddenly, rainfall, water-levels, temperature, winds and seasons, all conditions which since time immemorial have provided habitats hospitable to plants, animals and human beings as well, cannot be taken for granted any longer. As adverse conditions arise, habitats become less hospitable; in the extreme they become unfit for human settlement. Most obviously, a rise in sea-level would slowly make some of the world's most densely populated lands uninhabitable. Less obviously, changes in humidity and temperature are expected to force changes in vegetation, species diversity, soil fertility, and water availability. Moreover, environments may become unhealthier; crops are more likely to be infested by certain pests and weeds, while humans may contract malaria, dengue fever or infectious diseases more frequently. In short, climate change will unsettle life, especially in areas which are already on the borderline.

The dangers are greatest for those who are most vulnerable. As it happens, not every citizen of the world is equally exposed to climate turbulences; it is the rice farmers in the Mekong Delta and the fisher folk along the coast of Senegal, the shepherds in the highlands of Ethiopia or the slum dwellers on the hillsides in La Paz, whose livelihoods are threatened by climate change. People will be forced to leave their homes and homesteads. The economic base of numerous villages and towns will be altered by the changes brought to agricultural production and productivity. Migration to cities may increase. Shanty towns will risk mudslides and devastation. And diseases affect those with the least defenses – the poor. Indeed, the threats caused by global warming are by no means equally distributed among the world population; they disproportionally fall upon the socially weak and powerless, who already live in slums, on marginal lands, or in subsistence situations. It is the poor who will have to bear the brunt of climate risks, not the rich producing them.

Bringing down the use of fossil fuels among the global consumer classes is therefore imperative, not just for the protection of the atmosphere, but for the protection of human rights. Since the Bill of Rights,

fought over during the English Revolution, the person's right to physical integrity is at the core of any canon of fundamental rights which the state is required to guarantee. But millions of people are about to lose this centerpiece of citizenship. In this case, though, it is not state power which assaults physical integrity, but the accumulated and tele-transported impact of excessive fuel combustion in the affluent parts of the world. It is the invisible human hand in any weather event and climate trend which gradually undermines the integrity of human health and habitat. But in an unfolding world society, nobody can any longer be sacrificed on the altar of growth and affluence. If every person is considered to possess world citizenship, the minimal equity rule implies that the choice of resource base by the well-off should not exacerbate existing inequities, leaving the already underprivileged worse off than they are today. Building emission-poor economies in the South and North is actually implementing cosmopolitan politics.

Contraction and Convergence

Capping greenhouse gas emissions globally is indispensable for maintaining the integrity of life on the planet. Sixty percent in six decades is roughly the order of magnitude contraction requires. However, the Kyoto Protocol so far fails to live up to this challenge. It does not demand serious reductions from the North, and does not include newly industrializing countries from the South. Nevertheless, for the second commitment period of the Kyoto process, an ecological breakthrough cannot be reasonably expected unless the South assumes commitments as well. Otherwise, the North will stall, and, more importantly, the steep rise in emission levels in the South will continue unchecked.

At this point, the issue of equity will reveal itself as the major bottleneck for any serious progress in climate protection. On the one side, the South will refuse obligations before the North follows through on its responsibility, while on the other side the North will not be forthcoming before commitments for the South are defined. Unless the reduction commitments of the North and those of the South are balanced out in fairness, no real climate protection will happen. Only a framework that respects the principle of equal per capita right to the resources of this Earth will eventually hold up to equity and fairness. Any other allocation scheme ("grandfathering", "cost-base") would repeat a colonial constellation of granting

It is the poor who will have to bear the brunt of climate risks, not the rich producing them.

disproportionate shares to the North. If the use of the commons has to be restrained through common rules, it would violate the principle of equity to design these rules to the advantage of some and the disadvantage of many. The equal right of all world citizens to the atmospheric commons is therefore the cornerstone of any viable climate regime. Therefore, for the second commitment period of the Kyoto Protocol, a process allocating emission allowances based on per capita equal rights to each country, has to be initiated. This is hard on the North, but not unfair as in exchange for accepting the rule of egalitarianism in the present, industrial countries would not be held liable for emissions accumulated in the past.

It is from this right to atmospheric commons that all countries (and all classes) in the long run converge in their trajectories upon a similar level of fossil

energy use per capita. The North contracts downwards, and the South converges upwards. Over-users will have to climb down from the present level, while under-users are permitted to raise their present level, albeit at a gradient that is much less than the one industrial countries went through historically, levelling off at the point of convergence. However, the convergence of North and South on equal emission levels cannot be achieved at the expense of contraction, i.e. the transition to globally sustainable levels of emissions. Once again, sustainability gives shape to equity. The vision of "contraction and convergence" combines ecology and equity most elegantly; it starts with the insight that the global environmental space is finite and attempts to fairly share its permissible use among all world citizens taking into account the future generations as well.

4.2. Relieving Pressure from Ecosystems and Communities

Today's world suffers from two distinct environmental crises, the crisis of fossil material and the crisis of living systems. Both crises are interlocking, but different in origin and manifestation. The fossil crisis has its roots in the rapid transfer of solid, liquid and gaseous materials by industrial technology from the crust of the Earth into the biosphere. The crisis of living systems, however, derives from the inordinate pressure put by man on communities of microbes, plants, and animals. This pressure weakens and sometimes upsets entire ecosystems, small ones and large ones, endangering in turn humans themselves, who as living creatures are in a wider sense part of the very same biotic communities. People may be affected in two ways; first, ecosystems may yield a diminished amount of useful produce, such as meat, milk, crops, timber, fiber, water. And second, ecosystems may provide less life-support services, such as purifying air and water, decomposing and recycling nutrients, or forming soil. While the fossil crisis has been in the public eye particularly in the North, the crisis of living systems is commanding attention especially in the South.

The reason is simple. The direct victims of the degradation of living systems live predominantly in

the South, or more precisely, are typically part of the majority beyond the corporate-driven consumer classes in North and East and South. Essentially urbanite, the consumer class lives in a cocoon of shops, tubes, roads and artifacts, which shields their senses and their existence from the decay of forests, fishing grounds, water tables, topsoils, and plant diversity in the countryside. Geographically or psychologically, the scenes of accumulation and the scenes of destruction, the places of comfort and the places of distress, are usually separated from each other by large distances. This is why the tremendous increase in scale and speed of ecosystem destruction has gone largely unnoticed in the North. And this is why awareness about the human despair and suffering caused by the fraying web of life can so easily be ignored.

A Spider Web of Resource Flows

The WTO framework and generally the exposure of Southern economies to the world market have led – with a few exceptions in Asia – to intensified extraction and growing exports of natural treasures from the South and from ex-communist countries. Forests,

for instance, are a particularly important reservoir of biological wealth. But the draw of international markets has been an enticement for countries to cut down trees faster than required to meet domestic demand alone. Indonesia and Malaysia, for example, have both pushed plywood exports heavily in recent years, contributing in no small measure to rapid deforestation. Moreover, mining and energy extraction also threaten the health of forests, as well as mountains, waters, and other sensitive ecosystems. They represent the second biggest threat to frontier forests after logging. Furthermore, the food economy is now deeply integrated into the world market. Though Southern countries are net importers of basic food stuff such as grain and meat, they are major exporters of many cash crops, such as bananas, coffee, cotton, soybeans, sugar cane, and tobacco. Recent decades have seen a rapid growth in so-called nontraditional exports, principally flowers, fruits, and vegetables to be freshly delivered by air freight to Northern markets. Finally, ocean fisheries are by now strongly linked to the global marketplace. Fish exports, in particular from countries like Thailand, China, and Chile, have risen to about half of all fish exports today.

With the important exception of grain, natural resources predominantly flow from Southern (including ex-communist) to Northern countries. Nature, once put on the world market, gravitates towards the North, attracted by the force of high purchasing power. Indeed, apart from labor-intensive manufactured goods from Southeast Asia, China, Mexico and Brazil, trade flows from the South to the North consist in minerals (including oil and gas) and a broad range of tropical commodities. Someone living in a OECD nation consumes twice as much grain, twice as much fish, three times as much meat, nine times as much paper, and eleven times as much gasoline as someone living in a less industrialized country, and a similar pattern of unequal consumption usually prevails inside these countries as well, between the consumer class and the rest.

The material flow from Southern to Northern countries has been intensified by trade liberalization. As barriers have been removed for both the outflow of materials and the inflow of investment, resource corporations enjoy a greater scope of action. They can more freely scan the globe for the last resource stocks and quickly move to exploit them. They often have the clout to form states within a state on the territory of Southern export countries. And they can stimulate

demand on the consumer markets, launching new products and new fashions. Indeed, the frontiers of drilling, logging, catching are now pushed to the ends of the earth – oil fields are developed deep in the jungle as well as deep in the sea, timber is shipped out of Patagonia as well as out of Siberia, and floating fish-factories comb the oceans from the Arctic Circle to the Antarctic. However, as large parts of the South keep on specializing in exporting natural resources, they get economically trapped in long-term price deterioration. Commodity prices have been falling for decades (except for coffee till recently), a trend which is reinforced at the moment when too many exporters strive to gain from selling resources on the world market. Moreover, the primary sector usually shows little spillover into the rest of the economy; neither occupation nor innovation or education are positively affected. The result is a low internal dynamism which may drive exporting economies into further impoverishment.

Moreover, the domestic environmental footprint of exporting resources is often considerable: soil erosion, sinking water tables, and genetic impoverishment through large-scale farming; contamination and tailings in mining; pollution and habitat destruction through oil production; reduced biodiversity and water retention through logging; and the impact of the infrastructure of roads, pipelines, transmission lines associated with most extraction activities. Taking also into consideration the tendency to displace polluting industrial activities from North to South, it is likely that environmental impact by unit of export value has increased substantially over recent years. Against this background, it is probably safe to say that Southern countries carry an increasing part of the environmental burden of the world economy.

Environmental Governance Shot Full of Holes

The Convention on Biological Diversity, the other major outcome of UNCED with the Climate Convention, did not succeed in putting a break on the outflow of biological resources neither from South to North nor from rural areas to urban centers. First of all, because CBD was not concerned with the reform of wealth, i.e. with the attempt to arrive at production and consumption patterns that require a much reduced harvest from forests, fishing grounds, soils, and aquifers. Dealing with the supply side rather than with the demand side, it specified ecological, legal

Nature, once put on the world market, gravitates towards the North, attracted by the force of high purchasing power.

For the CBD puts an end to the colonial legacy of resource robbery without payment.

and political constraints for the use of ecosystems. Secondly, from the beginning CBD was predominantly about regulating the exploitation of a new generation of raw materials – the genetic resources. Though the Convention speaks about diversity at the level of ecosystems, species, and genes, a great deal of diplomatic flurry was centered around access to and rewards from genetic material. Seen from this angle, the Convention is less about protecting the wealth of nature than about protecting the wealth of a variety of economic actors in the gene business.

In the end, the Convention does not explicitly address the major natural ecosystems, such as forests, oceans, wetlands, rivers, or grassland, nor man-made ecosystems, such as modern agriculture, arguably the single most important factor in biodiversity loss. Although for sure some of these areas were discussed in the Working Groups under the Convention, results have so far remained only at the level of recommendations. In fact, some ecosystems are dealt with in other forums. For example, forests were already a very contentious issue in Rio and several subsequent international forums, up to and including the UN Forum on Forests. But without any outcome whatsoever; trading interests have crowded out protection interests. Furthermore, the Convention on Desertification, signed two years after Rio, deals with soil fertility, but only in arid and semi-arid regions. And finally, FAO claims jurisdiction over agro-ecological systems, but conservation and livelihood rights have hardly been a priority. In sum, what sticks out addressing the exploitation of biological resources and living systems, is the absence of effective international environmental governance.

Equity in the Biodiversity Convention

The CBD definitely rates higher than other accords in terms of equity. It has evolved principles that could guide other agreements as well. So as far as fairness between nations is concerned, to a certain extent, the South has succeeded in adjusting the balance with the North. For the CBD puts an end to the colonial legacy of resource robbery without payment, by affirming the sovereign right of nations over their natural resources. After all, the hotbeds of biodiversity are found in tropical or semi-tropical countries, while resource- and life-industries are found in North America, Europe, and Japan. Due to this geographical asymmetry, the need of gene-tech companies for living material had set off a new round of resource

conflicts between South and North. Against this background, Southern countries decided to fend off the understanding of biodiversity as a “common heritage of mankind” – a definition of plant diversity codified by the FAO Undertaking of 1983. Out of the fear that such a conception would expose their treasures to be raided by Northern companies, they successfully insisted on their national sovereignty over natural resources. With this definition of ownership, the road was paved for establishing the right to regulate access to these resources and to demand a share of the benefits which accrue from their use. In fact, next to conservation and sustainable use, access and benefit sharing (but so far only for genetic resources) has been enshrined as one of the principles of the CBD. In terms of legal authority over domestic resources, Southern states are now on an equal footing with Northern states.

However, a success in equity is not necessarily a success in sustainability. In the CBD, it was mainly commercial, not environmental interests that made the South stress national jurisdiction over resources. Given the prevalence of economic interests in today’s world, it is unlikely that more equity among nations will lead to a decrease in environmental degradation. Instead, nations – and in particular the domestic middle classes within them – are likely to continue to turn their natural patrimony into money, albeit keeping more profit at home. From an environmental point of view, however, there are limits to sovereign exploitation just as there are limits to imperialistic exploitation. National sovereignty cannot constitute full ownership, because resources and living systems are common goods – be it for a community, for a nation, or for all the inhabitants of the Earth. Since the web of life sustains itself through systemic and interlocking cycles, there can never be a pure, unconstrained property on living systems, certainly not after nature has ceased to be abundant. Seen in this light, the sovereignty conferred to nations by the CBD implies the right to non-interference from outside, but not the power freely to dispose of natural resources from the inside. All countries must recognize that they hold in trust natural resources vital to both people within their borders, beyond their borders and people beyond present generations. It is environmentally not enough to redefine equity as equal right of ownership; ecology requires to exercise equal rights with care and restraint; otherwise equity would be nothing else than equal participation in a robber economy.

With respect to equity between the globalized middle class and the marginalized majority, the CBD – particularly in Article 8 (j) – contains provisions that go a long way in respecting the rights of traditional communities and indigenous peoples. After all, it is them rather than states who are often the true stewards of biodiversity. For instance, about 350 million people worldwide live in forests, relate to them as their habitat, and depend on them for subsistence. The “forest nation”, in other words, has more inhabitants than the US and Canada put together. Not only their economic, but also their cultural security depends on the security of forests. For such people, it is a matter of economic and cultural survival that the rights to their habitat, to their knowledge and ways of life, and the rights to a certain degree of self-governance are honored and safeguarded. Yet the claim to traditional resource rights easily clashes with the claim to state sovereignty over natural resources (and even more so with the claim to open access for foreigners). Access for whom? And to whose benefit? These questions are contentious also within nation states; they often set the developmentalist state against local communities.

With regard to this type of conflict Art. 8(j) states: “Each Contracting Party shall ... respect, preserve,

and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyle relevant for the conservation and sustainable use of biological diversity ... and encourage the equitable sharing of benefits arising from the utilization of such knowledge, innovations and practices”. The clause, obviously, is open to a protectionist interpretation (“preserve and maintain”) and to a rights-based interpretation (“respect”, “equitable sharing of benefits”). It circumscribes the terrain of controversies, which is opened up by the recognition of local communities, usually counterpoising livelihood rights to economic development rights. CBD has thus moved from regarding traditional communities as a part of the problem, to regarding them as part of the solution. Such a stance recognizes the long-proven technical and spiritual competence of traditional and indigenous communities to care for a diversity of plants and animals, and other life expressions. Therefore, in this perspective, the call for biodiversity conservation coincides with the call for greater autonomy on part of local communities. Indeed, there is an approach germinating in the CBD which holds a broader potential for both ecology and equity: to simultaneously enhance environmental conservation and human rights.

The “forest nation” has more inhabitants than the US and Canada put together.

4.3 Respecting Community Rights on Genetic Knowledge

Since time immemorial, human communities have harbored knowledge about diverse and complex ecosystems. In fact, the continuing existence of these communities is a testimony to the success and long-term sustainability of traditional strategies of generating and communicating knowledge. In contrast, molecular biology, biochemistry, and genetic engineering started their massive scientific break-through some fifty years ago. In scientific terms this is a long time. In evolutionary and cultural terms it is but a start. Nevertheless, this system of knowledge which is based on modern science, industry and capital, is spreading across the world. When it comes to genetic resources, should modern agro-science replace all other systems of knowledge?

Knowledge Systems in Conflict

Many of the successful systems of indigenous and community knowledge about the natural world share the following characteristics. These systems of knowledge

- are community-based
- display diversity, both biological and cultural
- define biological knowledge and resources as commons
- deliver to subsistence and local markets
- are largely based on women’s stewardship of knowledge and resources
- focus on resilience and food-security
- optimize in context rather than maximize single variables

- pose low thresholds for participation in innovation
- offer field-evidence for viable long-term solutions at a particular location
- are highly contextualized biologically, socio-economically and culturally
- represent knowledge in community practices
- communicate knowledge orally
- use biological diversity in mass-selection and in cultivation
- integrate aspects of crop cultivation, food preparation and healthcare
- are neither capital- nor energy-intensive.

Diversely, scientific systems of knowledge have been developed by philosophers and scientists from the beginning of modern times in Europe. Modern science started off as an reaction against totalitarian structures of state and church. Public universities allowed for the sharing of knowledge, thus delinking knowledge-generation from the promotion of the interest of the rich and powerful. In this manner, modern science became a very strong tool for acquiring information of generalized and even “universal” value and applicability. In fact, its experiments and results can be reproduced world-wide. The most important strength of science lies in prognostic accuracy which largely derives from a single factor analysis. Reliable information about causal relationships has become the hallmark of modern science.

However, only disinterested science is able to safeguard the critical function of science, and this has been generally guaranteed by public funding. Objectivity is impaired when scientists depend on funding from commercial sources. Moreover, when it comes to complex evolving systems, long-term time frames, and many variables, including human actors, strict scientific prognosis tends to turn into blurry expert opinions. Scientists may be tempted to maximize system predictability by reducing environmental complexity and the diversity of human choices.

In particular, the fifty years of scientific discoveries and inventions in bio-sciences have been accompanied by major changes in the organization, funding and socioeconomic roles of science. This new field is very capital intensive. Industry involvement and funding plays an important role in quickly turning basic research into pre-competitive and competitive endeavors. And science has become a major factor in the global competitiveness of countries. As a result, science moved away from the “luxury” of basic

research and from the critical function of science. Patents on biotechnological innovations applicable to industry, for instance, have often been obtained for reasons of fund-raising, for competitive advantage, or for pushing up share-holder value.

The modern system of biological knowledge, usually called biological sciences, has specific characteristics. They can be juxtaposed to those of community knowledge systems listed above. Modern knowledge systems

- are globally applicable
- allow world-wide reproduction of results under defined experimental conditions
- privatize biological knowledge and resources as intellectual property
- deliver to the world market
- are based on expertise predominantly fashioned by men
- maximize short-term yield and performance
- experiment under laboratory conditions, reducing variables and reliably linking cause and effect
- have a high financial and cultural threshold for reaching expert status
- depend on short replacement cycles of hypotheses, scientific knowledge and products
- often lack a sufficient period of experimentation until the relevant field evidence of long-term impacts is available, thus inadvertently making progress blind
- decontextualize genetic information, often neglecting local ecological, socioeconomic and cultural specificities
- represent research in publications and industrial applications
- communicate knowledge in written form
- need biological diversity for selection of useful traits, but release homogeneous seeds for cultivation
- focus on single genes which may have predictable market value
- separate agriculture, nutritional sciences and medicine into different departments
- are capital- and energy-intensive.

Should this new generalizable system of knowledge, which is in conformity with the global market, replace all other systems of knowledge? Respect for cultures as well as prudent skepticism about the long-term effectiveness of science suggest a negative answer. Thirty years of exclusive privileges

Only disinterested science is able to safeguard the critical function of science.

for one system of knowledge, for example, have all but proven that science will remove hunger from the face of the earth. Fairness and unmitigated emergencies both demand that the community systems of knowledge be given a chance. If only because they have experience and impact at the level where the problems arise.

Whose Knowledge Counts?

When knowledge systems conflict, rules are required to guarantee fairness between the very diverse players involved. Neither the uncritical praise of all the benefits claimed by modern science, nor the uncritical praise of all the remedies offered by local communities will solve the problem. It should be underlined however, that there is a bias nowadays to call the former "rational" and the latter "irrational". Modern science has been described as a late form of colonialism, because it assumes the power to define what is rational, innovative and relevant across cultures. And representatives of non-western cultures challenge the lack of contextual knowledge in modern reductionist science. They are deeply disturbed by the structural favors the already rich and well-fed receive in international trade agreements. For who holds the knowledge system is likely to prevail in politics as well. Yet mutually supportive cooperation requires to discard such claims of dominance.

In this context, however, international negotiations have so far left a great deal of unfinished business. Who owns the resources? Whose knowledge and innovations count? Who can avoid the undesired and destructive effects of human activities and who cannot? Who carries the responsibility and is obliged to provide reparation? Whose creative contribution is considered a free good and who reaps the financial benefits of privatisation? These are some of the questions underlying the international debate on food, agriculture, biological resources, Farmers' Rights and Trade-Related Intellectual Property Rights. Agreements need to be evaluated on their capacity to establish fairness and due respect to the creators of the very basis of common food security, the discoverers of physiologically active biological compounds, and the teachers of their wise application in meals and medicine.

In 1972, the Stockholm Conference recognized biodiversity as the "common heritage of mankind". It was taken for granted that genetic resources are in common ownership, and that only freely shared

knowledge would be fertile knowledge. Scientific innovations, such as more precise descriptions, new methods of analysis, or a better understanding of biological functions were not seen as patentable, because they were assumed to be discoveries rather than inventions. As a consequence, gene banks were created to hold the common heritage in trust, although they were not given a clear legal status.

As it happened, the communities who had provided the plant genetic resources for food and agriculture in the first place, were then denied access to these collections. This has been partially rectified by the International Treaty on Plant Genetic Resources for Food and Agriculture in November 2001 by the FAO Conference. Farmers' Rights, i.e. the recognition of farmers as breeders, were sanctioned, though in a rather weak form. Because the free access of farmers and breeders to plant genetic resources, unrestricted by intellectual property rights, is not yet comprehensive. Only 35 genera of crops and only 29 forage species are included. It will be crucial to extend this list and to maintain the integrity and autonomy of the Treaty in relation with other agreements, notably the WTO Agreement on Trade-Related Intellectual Property Rights (TRIPS).

At the UN Conference in Rio de Janeiro, the notion of "common heritage of mankind" was dropped in favor of national sovereignty over genetic resources. Powerful global players had pretended free access to resources. And communities, the stewards and providers of biodiversity, had been left without benefits. Therefore, both the rights of national states and the rights of peoples and communities were recognized by the Convention on Biological Diversity. But how these rights relate to each other remained unresolved.

However, a clarification is urgently needed, as two recent initiatives show. On February 1, 2002, a Treaty Initiative to Share the Genetic Commons was announced. Initiators were hundreds of NGOs from more than 50 nations. The initiative rejects patents on life and declares the global gene pool as shared legacy and collective responsibility. But such a notion takes the debate right back to Stockholm 1972. It still remains unclear how should address the asymmetry in power and benefits, and how one should prevent the strongest brother from administrating and appropriating the common heritage. The second event was made public on February 19, 2002. The Group of Allied Mega-Biodiverse Nations was formed by China, Brazil, India, Mexico, Indonesia, Costa Rica,

Who owns the resources? Whose knowledge and innovations count?

Colombia, Ecuador, Kenya, Peru, Venezuela and South Africa. It is an OPEC-type of group which will press for better protection of their interests in the world market. It will try to protect itself against the fatal drop in prices that invariably affects competing exporters of raw materials. It will press for more equitable trade rules on patenting and registering products based on plant and animal resources. And it will improve the monitoring of bioprospecting activities, insisting on prior informed consent and mutually agreed terms for concessions. After all, the attempt to arrive at a legally binding agreement on Access and Benefit-Sharing under CBD had been watered down to Voluntary Guidelines in Bonn at the end of October 2001. A consistent clarification of rights, responsibilities and roles of the different actors, is therefore still up in the air.

Unsurprisingly, confusion on rules helps the most powerful actor. It is a birth defect of the Convention, that it failed to link the principle of free access to the obligation to conserve, sustainably use and equitably share the benefits arising from the use of biodiversity. Countries which refuse to ratify the Convention thus enjoy competitive advantages. Indeed, the US, a leader in biotechnology, in patenting and in accessing biodiversity world-wide, has not ratified the Convention, but continues to press for TRIPS under WTO to facilitate unrestricted trade in gene products and gene patents.

TRIPS and the Marginalization of Community Rights

Apart from this conflict, there are more profound contradictions between Trade-Related Intellectual Property Rights (TRIPS) and the aims of the Convention on Biological Diversity. For one, it is likely that patents in the long run lead to reduced biodiversity in the field. And they certainly disfavor small farmers in the South, unless their rights to knowledge is protected by equally strong and enforceable regimes. At any rate, protection of intellectual property is not a goal in itself; it has to be contextualized with public interest and socioeconomic well-being. Yet food security and health are eminent matters of public interest and collective well-being. For this reason, a review of TRIPS, especially of Article 27 (b), as proposed by Southern countries, which would aim at better balancing rights and responsibilities, is long overdue.

It is too easily forgotten that patents gained public acceptance, because they provided protection

for the small inventor against financially stronger actors. They were meant to widen the diversity of technological innovations. But under TRIPS, the small inventors providing most of the food and the basis for future food-security around the world are not receiving adequate protection against financially stronger players. As yet, neither UNCTAD's Biotrade Initiative, nor the attempts of the World Intellectual Property Organization (WIPO) have come up with fair solutions. However, fairness and the equitable sharing of benefits will not be achieved unless the specific characteristics of community knowledge systems are recognized. Indeed, far from being just underdeveloped attempts at Northern science, carried on by anonymous inventors and yielding few industrial applications, (making them ineligible for private trade-related intellectual property), they are actually systems of their own kind, which need to find specific sui generis recognition.

Fair Wealth

- Poverty talk is common, wealth is taboo. Will the well-off be able to live without the surplus of environmental space they occupy today?
- De-intensify South to North material flows.
- Look beyond the Kyoto Protocol. Adopt a contraction and convergence approach, recognizing equal rights to the atmospheric commons.
- Include forests and water in international governance. Learn from the biodiversity convention the principle of fair access and equitable benefit sharing.
- Protect community knowledge systems on food and agriculture against the claims of governments and corporations. Whose knowledge is a free good and who turns it into patents to be paid?



*The Lifeboat:
Friends of the
Earth action on
climate change
(Bonn 2001)*

Part 5

Governance for Ecology and Equity

There is not just one way to build the world society, as there has not been just one way to build nations. National societies that have once been formed reconfiguring smaller social units, such as cities, counties or tribes, have taken the form of dictatorships, kingdoms and democracies. Likewise, the creation of the global society, which will reconfigure smaller units, such as nation-states, civil society organizations and private enterprises will no doubt take different forms. However, the precise shape of the global society, its prevailing ideals, its winners and losers will evolve from innumerable debates, competing imaginations, and protracted power struggles. Today, the battle is on. Names of places, such as Seattle, Port Alegre, or Davos, have become symbols for the trial of strength which is in course between sections of the global society with conflicting interests, visions, and backgrounds. What kind of globalization is desirable? This is the key question which has moved to center stage at the threshold of the 21st century. The Memorandum is a small attempt to contribute to this worldwide self-interrogation.

The globalization process is driven by two mainsprings. The first is technology that has increased the connectivity of people across large distances. Airplanes take people to far-away places, television brings home distant events, the Internet pulls people into a worldwide but distance-less space, satellites convey pictures of the Earth from outer space. For better or for worse, present generations experience the world in real time and at zero distance. This historical shift in both infrastructure and consciousness cannot be reversed. It will remain part of the human condition in the century to come. The second mainspring is the twenty-year wave of deregulation, privatization, liberalization of capital flows and global trade, and the export-led growth policies that followed the collapse of the Bretton Woods fixed currency-exchange regime in the early 1970s. The IMF and WTO are the pivotal drivers of this process. We believe that these two phenomena must be dealt with separately. It is the central assumption of this last part of the Memorandum that worldwide connectivity does not necessarily imply the imperative of neo-liberal rule. Quite to the contrary, the unfolding transnational space has to be shaped by the values of justice and sustainability, which take paramouncy over the value of economic efficiency.

Broadly speaking, there are presently two concepts of globalization, which have gained prominence in recent controversies. Corporate globalization, which aims at transforming the world into a single economic arena, allows corporations to compete freed from constraints in order to increase global wealth and welfare. This particular concept can be traced to the rise of the free trade idea in 18th century Britain and has come, after many permutations, to dominate world politics in the late 20th century.

Democratic globalization, on the other hand, envisages a world that is home to a flourishing plurality of cultures and that recognizes the fundamental rights for every world citizen. The roots of this concept extend back to late ancient Greek philosophy and the European Enlightenment with their perception of the world in a cosmopolitan spirit.

We believe that the cause of justice and sustainability would be caught in quicksand unless it is elaborated in the framework of democratic globalization.

5.1. Community Rights

A sizable part of the world's citizenry lives in rural communities, deriving much of their subsistence from the soil, forests, grassland, and waters around them. Large territories, mountain ranges, or long coastlines provide the habitat of tribal communities, indigenous peoples, forest dwellers, fisher folks, and a wide range of local communities. These communities often live in ecosystems whose resources are sought after by corporations and state agencies, which cater to the consumption needs of urban and industrial centers far and near. In the past, development programs have often transformed these communities into "victims of development", by driving them from their valleys, contaminating them by oil spills, displacing them from fertile land, or depriving them of fish and animal resources. In light of these trends, the best way to protect both human and natural communities is to consolidate the rights of peoples to their resources.

Recognize Rights to the Natural Habitat

Natural spaces provide important sources of food, shelter, medicine, not to mention sources of cultural memory and spiritual uplifting. It is a matter of fundamental human rights that local communities can enjoy the right to resources such as land, water, fishing grounds, forests and seeds. They should not be dispossessed of these resources without prior consent nor fair compensation. The rights of local communities to their resources should be integrated into national and international law. The OAU Model Law (2000) on community rights provides a good example.

Land. All individuals and communities have the right to use all the natural resources on the land they control, and the corresponding obligation to protect the integrity of those resources. Communities should have the right (and the obligation) to control access to their land and to manage their resources in accordance with their customary laws and practices. Moreover, they should have the right to a fair and equitable share of benefits resulting from the use of their resources, including their knowledge, technologies, traditional practices or biological and non-biological resources.

Water. Water is essential for all forms of life. All living beings should enjoy fair and equitable access to this vital resource. This means that privatization of water resources should be strictly prohibited. Local communities have the right to determine access to their water resources and to manage them in accordance with their customary laws and practices. No one is entitled to restrict access to a water body, unless it has been artificially constructed. And no one should contaminate water bodies which are vital to communities, without providing fair compensation and/or restoration.

Seeds. Local communities have the right to the knowledge, technologies and practices they use in the utilization and management of biological and non-biological resources. In particular, they have the right to save, exchange, plant, and sell seeds from a previous harvest. Consequently, no patents or other restrictive intellectual property rights should be claimed on their knowledge and practices.

Initiate a Convention for Community Resource Rights

The principles underlying the Biodiversity Convention such as “full and effective participation”, “access on mutually agreed terms”, “benefit sharing” and “prior informed consent” can help to guide the resolution of other types of resource conflicts between corporations as well as state agencies and local communities. The starting point for such an approach includes the two main human rights instruments: the International Covenant on Civil and Political Rights, and the Covenant on Economic, Social and Cultural Rights. Article 1(2) of both these documents affirm the right of all peoples “to freely dispose of their natural wealth and resources ... based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence.” Peoples, according to various sources of international law, enjoy a bundle of rights, which includes individual and collective human rights, the right of control over traditional lands and resources, and cultural rights.

Embedding the protection of living systems into community resource rights will serve to restrict the unsustainable exploitation and outflow of resources. Private enterprises would have to recognize the priority rights of residents to their habitat and negotiate the terms for access and equitable benefit sharing. This would amount to an important shift in the power balance. For example, oil corporations would be required to obtain the consent of indigenous peoples for their drilling operations, forest companies would have to engage in collaboration with forest dwellers, dam builders would have to obtain prior informed consent from possible flood victims, and fishing companies would have to acquire harvesting shares from local authorities. Rules regarding fair access and equitable benefit-sharing for traditional communities and indigenous peoples must underlie international agreements on forests, fisheries, or mining. The WSSD should launch a process to commence negotiations towards a UN Agreement on Community Resource Rights.

Establish a World Commission on Mining, Gas and Oil Extraction

Large resource extraction and infrastructure projects usually involve a broad range of stakeholders, including government authorities, corpora-

tions, banks, multilateral institutions, donor governments, scientists, public interest groups, as well as the inhabitants of development sites. The effective mitigation of the environmental and social side-effects of large-scale projects requires the collective participation of all stakeholders in assessing past experiences and creating new regulatory frameworks. The World Commission on Dams (WCD 2000) could serve as a useful model.

The WCD, which concluded its mandate in 2000 has been an unique experiment in global public policy making. It included 12 members from government ministries, business and civil society, ranging from pro-dam lobbyists to anti-dam activists. Initiated by the IUCN and the World Bank, it was supported by a professional secretariat and accompanied by a 68-member forum of stakeholder organizations. Established to address the conflicting views that have made large dams a flashpoint in the arena of environment, development, and justice, the Commission concentrated on two tasks. First, it assembled a comprehensive knowledge base about the development implications of large dams. Second, it developed criteria and guidelines to advise future decision-making on dams. The Commission had to bridge enormous differences in opinion, but did so successfully by locating infrastructure development in a human rights framework.

Community Rights

- Recognize rights to the natural habitat by incorporating them into national law. To have control over land, water, and seeds is a matter of human rights for communities.
- Initiate a Convention on Community Resource Rights. Resource conflicts are frequent between communities, state agencies and corporations. Fair access and equitable benefit-sharing are fundamental cornerstones of any international agreement.
- Establish a World Commission on Mining, Gas, and Oil Extraction. Modeled after the World Commission on Dams, representatives from communities, NGOs, business, and governments should review past experience in resource extraction projects and identify criteria for future decision-making, guided by a human rights framework.

Independence, inclusiveness and transparency were important ingredients for success, along with the influential presence of anti-dam movements across the globe. The application of the Commission's conclusions to the wider spectrum of stakeholders leaves much to be desired. Moreover a major sponsor, the World Bank, has so far chosen to give no heed to the conclusions. Nevertheless, it is a model that could be successfully replicated in other sectors, such as mining, gas and oil extraction. Similar to large-scale

dam projects, these sectors often exact a heavy toll on the environment, despoiling the habitat of local communities. They are the source of widespread conflicts between economic interests and human rights. Although the World Bank has responded to this problem by initiating an Extractive Industries Review, the inclusiveness and independence of this review are questionable. For these reasons, we propose the establishment of a World Commission on Mining, Gas and Oil Extraction.

5.2 Environmental Rights for Every Citizen

The politics of sustainability require sustained political support. How can this be achieved? A strategic divide separates two approaches to gain such support. Those who are skeptical of the insights and potential contributions of citizens, promote public education, which aims at enabling non-experts to trust and appreciate expert opinions. They demand more top-down public awareness-building, new and better approaches to public perception management, and bigger advertising campaigns for sustainability. This goes hand in hand with the promotion of partnerships and stakeholder dialogues between government, the private sector, NGOs and academia. This approach promises to thrive on the rationality and efficiency of experts. There are shortcomings, however in terms of the legitimacy and interest-driven motives of experts. The potential pretence of such talks to replace the rule-setting and monitoring functions of states, in conjunction with the financial weakness and dependence of NGOs, and the challenges to their legitimacy, could seriously destabilize the public interest. Loss of credibility would be the loss of the single most important asset of civil society.

Extend the Århus Convention beyond Europe

On the other hand, an attempt could be made to recognize people as the very sovereigns of states. This is the road to real public participation and democracy. A vibrant public sphere based on citizens rights is the only credible and long-term political support system for sustainability. Restricted information and participation leads to elite or bureaucratic democracies,

where a powerful few decide on policies that reflect only their interests. Frequently, the scales are tilted in favor of secrecy, particularly where economic stakes are high. States must recognize their obligation to promote fair and equitable access to and defense of such rights for all citizens. With such rights in place, societal actors, such as stakeholders, will be empowered to interact credibly and meaningfully.

We believe that a legally binding convention is necessary to establish citizens' rights and enhance public participation. Such an instrument could be based on existing instruments, such as principle 1 of the Stockholm Declaration on the Human Environment, principle 10 of the Rio Declaration, regional conventions on transboundary environmental and health impact assessments, the Prevention and the Precautionary Principles, the ongoing work on international legal instruments on liability and redress in the field of environment and health, such as in the Basel Convention, the POPs Convention, the Cartagena Protocol, and the Convention on Biological Diversity. Most of all, however, such a convention would build on the Århus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters of the European Region, which came into force on October 30, 2001. This landmark treaty aims at making the processes of environmental decision-making more transparent and accountable. It addresses three broad themes: the right of citizen to access environmental information, their right to participate in decisions, and their right to access to justice.

The Right to Information

This right ensures that public authorities make environmental and health information available to the public on request, without requiring a specific interest and in the form requested, without discrimination as to citizenship, nationality or residence. It also ensures that persons exercising these rights shall not be penalized, persecuted or harassed in any way for doing so. The right to information will be confronted with existing laws that limit disclosure, be they oppressive colonial legislation still in force, be they Official Secrets Acts, Trade Secret Acts, Legislation on the Confidentiality of Personal Data, Confidential Business Information, or Intellectual Property Rights. As such, the right to information will have to be weighed against other legally protected rights.

The Right of Public Participation in Decision-Making

This right provides for the participation in all aspects of decision-making. The right to participation enables interested parties to express alternatives to proposed activities. Furthermore, it makes information on products available to consumers, enabling them to make informed environmental choices. It thus furthers consumer participation in decision-making on technological and socioeconomic pathways, via their shopping baskets. Finally, public interaction world-wide will mobilize the necessary information to stop the dumping of waste, risks and other forms of social and environmental destruction on the less privileged.

The Right of Access to Justice

Citizens should be able to challenge any violation of their environmental rights in judicial bodies. The procedures should be expeditious, free of charge or at least affordable. Moreover, the public should have access to administrative and judicial procedures to challenge acts and omissions by private persons and public authorities, which contravene national environmental legislation. Violations of national environmental legislation covering issues such as the energy sector, metal production and processing, mining, mineral and chemical industry and their installations, waste management, pulp, paper and tanning industries, construction of railways, motorways, water issues, dams, pipelines, or the large-scale animal husbandry can be challenged in court. The Århus

Convention even guarantees the Right of Access to Justice in other countries' courts for transboundary kinds of harm. The vulnerability to legal challenge and the potential for costly fines will serve as an effective deterrent against future environmental contraventions.

Enforce Prevention and Precaution Principles

The Prevention Principle

Prevention of harm is the best method of environmental protection. However, immediate prevention means loss of capital, while profitable investment allows for an increase in capital with time. Mitigating environmental damage later on with the increased capital obtained, sometimes seems more profitable than early preventive measures. But this is only true for persons rich enough to be eligible for such calculations. Prevention of harm is an essential basis of pro-poor strategies. Poor people cannot buy their way out of environmental destruction. They cannot buy their children's way out of it.

The Precautionary Principle

Decisions and actions must be taken to avoid the possibility of serious or irreversible environmental harm, even where scientific knowledge is insufficient

Environmental Rights for Every Citizen

- **Promote citizens' rights. Not a restricted circle of experts, but a vibrant public sphere based on democratic rights is the best support system for sustainability.**
- **Globalize Århus Convention as access to information is a precondition of vigilance. It ensures right to participation – a precondition for citizen influence and guarantees access to courts – an essential precondition for accountability.**
- **Reinforce the Rio principles of environmental management. Prevention of harm is key to pro-poor strategies and should precede over scientific evidence of damage. The Polluter-Pays Principle calls for strict liability along with obligatory insurance against risks.**

or inconclusive. The Precautionary Principle is about responsible decisions in face of incomplete knowledge. However, the Precautionary Principle is being attacked as a trade barrier in trade negotiations. Only “sound conclusive scientific evidence and consensus” are accepted as a base for trade policy. But science is rarely completely conclusive, and every scientific consensus waits to be rendered obsolete by the next innovative step. Therefore, calling on states to fulfil their obligations towards their citizens and their environment only in effective situations that rarely – if ever – occur, simply means disempowering the states and depriving citizens and the environment of the means for effective protection.

5.3. Valuing Nature

There are approximately 100 million businesses in the world including about 10,000 or so large corporations that have a disproportionate impact on societies. As long as corporations’ short and long-term interests diverge from the public interest, no tinkering, reforms, regulations, or World Summits will change the status quo. Instruments are needed to ensure that short- and long-term thinking converges naturally so that the contradictions are erased. Environmental finance reforms, implemented nationally but coordinated internationally, could prompt business and consumers onto a course towards greater sustainability.

Remove Harmful Subsidies

To a considerable extent, environmental destruction is supported by public money. Governments grant a host of direct and indirect subsidies to the coal and oil economy, to industrial agriculture, to transport, and to the extraction of fish and forest. These subsidies are estimated at some \$800 billion-\$1 trillion annually worldwide. Removing such subsidies would save more than the \$650 million annually as estimated in *Agenda 21* as the cost necessary to shift societies toward sustainability. With the removal of such subsidies, clean production, sustainable agriculture, or artisanal practices would no longer be marginalized.

The Polluter-Pays Principle

Those causing harm should pay for redress. At a time of global interactions, when violators and victims are set apart by large distances, this principle gains in importance. In fact, the increasing separation of cause and effect in time and space is a real challenge for innovations to ensure justice and redress to the victims. A great deal of political will and legal creativity will be needed to establish international legally binding agreements on strict environmental liability. Moreover, the Precautionary Principle and liability regimes could be linked to insurance obligations with regards to environmental risks. Such a mechanism for immediate risk-pricing will provide economic incentives to prevent environmental harm.

Harmful subsidies function as “disinvestments”, leaving the environment and the economy worse off than if the subsidy had never been granted. They inflate the costs of government, add to deficits that in turn raise taxes, and drive out scarce capital from markets where it is needed. They confuse investors by sending distorting signals to the markets. They suppress innovation and technological change and provide incentives for inefficiency and consumption rather than productivity and conservation. They are often a powerful form of corporate welfare, that benefits the rich and disadvantages the poor. A very large, money-saving, cost-free investment in natural resources and ecosystems can be made by eliminating both the perverse subsidies now doled out regularly by governments to industries, and the practices, encouraged by those subsidies, that are environmentally harmful.

Shift the Tax Base from Labor to Resources

The tax base should be shifted from labor to the consumption of resources and the polluting and wasteful activities that result from consumption. Ecological tax shifts ensure that consumers get the right information in the price of goods. For example, by increasing the price of coal-based electricity, for instance, a tax on carbon dioxide emissions might

give photo-voltaic solar electricity the edge needed to enhance its competitiveness either domestically or internationally, helping in turn to stave off the threat of global warming. Similarly, if wood from primary forests were priced to reflect the loss of biological diversity suffered when it is harvested, timber from sustainably managed stands would be more competitive in national and global markets.

Likewise, consumers will ultimately change their behavior when they see first-hand from their electricity bills that double-glazing the atmosphere with their home heating oil is much more expensive than double-glazing their windows, installing insulation, and using renewable energy. This is equally true with forest products, fibers, food, transportation, materials, reactive versus enzymatic chemistry, and so on. It costs more to destroy the Earth in real time and less to maintain it in perpetuity, yet every signal from our pricing system and stock markets indicates the opposite. The act of marrying costs more closely to prices, in a fair, non-regressive fashion, so that the poor are protected, would do more for the champions of corporate sustainability in businesses around the world, than any other single act.

A restorative “least cost economy,” would move to a system of agriculture, forestry, transportation, construction, and communication that creates the least cost to the environment. Yet, it is as though only half a deck of cards has been dealt out, since industrialism was created. We are supposedly dealing with a capitalist system, but as it currently operates, only some capital is valued: the human-made capital, while the inherited resources, both renewable and non-renewable, continue to be treated as free goods, valueless until they are transformed into products and services. In a least-cost system, those resources, the “natural capital,” are valued at their true replacement cost. Instead of competing to produce the cheapest goods in terms of price, competition is about producing goods and services with the lowest possible impact on the health of the natural resource base, and thus the lowest cost to current and future generations. The lowest-cost system is the most effective, in both industrial and biological terms, and is better for the individual who is the customer, the worker who manufactures it, the habitat from which it is drawn, and for the generations to come.

As economies become increasingly integrated globally, the question of prices and costs plays itself out on the international stage. In the absence of coordinated international action, it will be difficult

for one country to move alone toward charging prices that reflect their full environmental costs. Consumers in one country will purchase imported products made artificially cheap by the failure of another country to adequately account for their real costs, while countries making a serious effort to move toward prices that reflect full environmental liabilities might find themselves at a chronic disadvantage in international markets. For this reason, coordinated international action is essential.

Introduce User Fees for Global Commons

No single country or company can claim a property right to the global commons, such as the atmosphere, air space, oceans, sea beds, or air waves. They belong to no-one, and as a result, they belong to the common heritage of humankind. They are common goods. And as long as common goods remain unregulated, open access prevails. When, however, rules are designed by a community to protect the common good from over-exploitation, the open access regime is transformed into a commons. A community, in this case the international community, must act as a trustee protecting the right of all present and future generations.

Trusteeship implies the identification and implementation of rules for a fair and sustainable use of the common resources. Indeed, the complete absence of rules covering that third class of property – beyond individual and public property – is one of the main

Valuing Nature

- Remove subsidies to resource extraction, transport, chemical agriculture as they suppress innovation, discourage conservation, and are environmentally harmful. These are forms of corporate welfare benefiting rather the already rich than the poor.
- Start international action towards full cost accounting shifting the tax base from labor to resources, pollution and waste ensuring right pricing of goods.
- Introduce user fees for global commons and feed the revenues back into measures protecting them. As open access favors overuse, fair charges for using the atmosphere, airspace, and the high seas would take pressure off the commons and encourage resource efficiency safeguarding them.

reasons why capitalism has gone so far astray. All along, capitalism has lived from metabolizing unpaid inputs, not unlike a parasite living from its host. To reverse this situation, a new generation of instruments are needed such as user fees for the use of common goods. User fees protect common goods by raising their price, and they make those who actually use the common good, pay for their use.

With regard to the atmospheric commons, it is obvious that any individual or any community enjoys a user right by their very existence. However, this right can be held up only to a level at which the common good can still regenerate itself. Over and above this sustainable level, user rights may be temporarily allowed at a cost to certain countries by consent of all other countries in international agreements. The allocation of emission allowances under the Kyoto Protocol is a step in this direction. Under a trading scheme, these emission allowances will be traded among the over-users who need them and under-users who can afford to sell them. Under a licensing system, however, no special user rights are assigned to under-users, because a common good cannot be divided into individual pieces of property. Instead, temporary rights to over-use are available to countries, which overstep the admissible emission limit. Also, these licenses could be linked to a fee, whose price may be formed according to the demand the permits on offer can find on the market. Either way, through a trading or a licensing system, a price tag is placed on the use of the atmospheric commons to regulate access.

Furthermore, global air space is used as medium for transport. On top of that, aviation is a rapidly

growing source of greenhouse gases, which is not covered by reduction commitments under the Kyoto Protocol. To compensate for the use and pollution of a common good, a user charge based on aircraft emissions is only fair. The WBGU, which has recently proposed such a charge (WBGU 2002), estimates the avoidance costs for aviation-related greenhouse gases at about 3-30 billion dollars annually, which means revenues from emission charges, therefore, could already generate three billion dollars right from the beginning. This would amount to roughly 30 times the annual budget of the UN Environment Programme. Such a charge aims at dampening the demand for air travel by incorporating some of the damage cost into the price of air tickets. Moreover, it is also an incentive for mobilizing the efficiency potential in engines, aircrafts and routing. Funds generated would preferably be used for mitigating climate effects; they could be used to fund, for instance, the proposed International Renewable Energy Agency or other agencies active in the international effort to combat climate change.

Finally, the use of the high seas for transportation is another classic example of a common good with open access. Although ocean shipping is not unwelcome in environmental terms, marine and air pollution is still considerable. For this reason, an annual fee, with rebates sound technology, should be collected from all ships, regardless of flag state or seat of the company. Most shipping, however, originates or ends in industrial countries; therefore, the OECD could set an example and take the initiative (WBGU 2002).

5.4 Markets and Common Good

Churchill once remarked that democracy is the worst system of government – except for all the rest. The same might be said of the market economy. Thanks to their ingenuity, their rapid feedback, and their diverse, dispersed, resourceful, highly motivated agents, markets attain unrivaled effectiveness. However, economic efficiency is an admirable means only so long as one remembers it is not an end in itself. Markets were never meant to achieve community or integrity, beauty or justice, sustainability or sacredness – and by themselves, they don't. It is up to

citizens, governments and lawmakers to ensure that all forms of capital – the natural, the social and the aesthetic – are as carefully safeguarded, as money is by the trustees of financial capital.

Go for Fair Trade, not for Free Trade

In theory, to achieve gains in real wealth in a liberalized world market requires the mobility of goods, capital and people. In reality, mobility exists for capital and goods flowing from North to South. There

is less mobility for people and goods flowing from South to North. Globalization thus opens the world for the rich and powerful, but prevents the poorer or weaker to enter affluent countries. The industrialized North is hesitant, if not hostile, when it comes to removing barriers to the free movement of labor. While WTO rules are supposed to open foreign markets equally, exports from Southern countries continue to be barred entry to Northern markets by tariff and non-tariff barriers. Economists estimate that reducing the remaining trade barriers could lead to income gains for Southern countries in the range of \$130 billion a year, roughly three times the sum total of the official development assistance.

Liberalize with care – in both the North and South

It is said that trade liberalization must be completed on all sides to be balanced. In our opinion, this position is correct within a free trade framework, but it is questionable within a sustainable livelihoods framework. The stubborn resistance of the North to open its societies to people and products from the South, is a powerful sign that full economic globalization is indeed impossible. Resistance to unconditional access stems from the fear that the cohesion of society cannot be maintained (as in the case of migration) or that large parts of agriculture will wither away (as in the case of agricultural products). In fact, both fears are justified. Full-fledged market liberalization threatens social integration and the maintenance of food and other ecosystems. Yet, what is true for the North is equally true for the South: industrial and agricultural imports from the North may undercut livelihoods and sustainability there as well. The only difference is that the North has the power to translate its internal fears into resistance of globalization at home, while the South is forced to succumb to the external politics of free trade, despite its own fears. Northern countries should stop imposing on the South what they themselves are not ready to give. They should concede to the South the same right they enjoy, namely the right to carefully choose which trade flows should be liberalized.

Seek fair access to Northern markets

Unconditional free access to Northern markets could damage the South, in particular in the agriculture sector. An “exports first” policy is at odds with a “food first” policy. It favors large farmers and transnational companies over small farmers. It promotes monoculture instead of biodiversity, and channels

public support into the export rather than into the livelihood sector. A “food first” policy would focus on food and livelihood security, protecting sustainable agricultural practices and promoting exports of small farmers at fair prices. Such a policy would not be interested in wholesale market access at any condition, but in a partnership between producers and consumers, which offers reasonable prices for products of guaranteed quality.

The call for unconditional market access is self-defeating, unless small producers and low-input agriculture benefit from it. Certainly, market access for developing country products must be substantially improved as a matter of justice and fairness. For instance, tariff escalation must be reversed because higher tariffs for processed products lock Southern countries into raw material export. Yet the South is entitled to more than just better market access. What is needed is a proliferation of fair trade agreements on all levels, between communities and corporations, regions and commercial associations, producer countries and consumer countries. Such agreements would include preferential treatment for small producers and for sustainable products at cost-covering prices. These agreements would not promote free trade at any cost, but rather fair trade, which has the potential of advancing both sustainable livelihoods in the South and family-based high-quality agriculture in the North.

Frame WTO Sustainably

The World Trade Organization (WTO), which sets the rules for international trade, embodies an unshaken belief in the benevolence of market forces. Focusing on the removal of so-called barriers to trade, it seeks to establish open markets across the globe, unencumbered by culture, political traditions, social rights, or environmental protection.

Keep the scope of free trade flexible

Given the differences in an unequal and complex world, it is not surprising that the application of rigid free trade standards across sectors and countries can cause great harm. For example, the import of cheap edible oils into India has marginalized hundreds of thousands of coconut producers, just as cheap corn from the US has ruined numerous farmers in Mexico, corn’s country of origin. Such effects are often dismissed as the unavoidable cost of higher aggregate welfare in the future. Yet this kind of argument flies

An “exports first” policy is at odds with a “food first” policy.

Trade liberalization will have to be limited when fundamental livelihood rights are at risk.

in the face of human rights. The UN Declaration of Human Rights, along with the subsequent Covenants, override free trade rules or structural adjustment regimes. Given that access to food, water, and elementary means of subsistence is part and parcel of human rights, trade liberalization will have to be limited when fundamental livelihood rights are at risk.

Against this background, the most suitable sector for free trade is industrial goods. In contrast, agriculture, water, land, and basic services, such as health, housing, and education, are not natural candidates for trade liberalization. In many cases, Southern countries are well-advised not to abandon their food sovereignty, i.e. their capacity to produce sufficient food on their own; otherwise, neither the independence of the country nor the security of peasants and fishermen can be maintained. Protection of livelihoods can be ensured either through a "development box", which allows support measures within a largely deregulated market, or through the exemption of agriculture from free trade altogether. Even if industrial countries stop dumping crops and meat on the world market through export subsidies – which should be eliminated, since they repeatedly destroy markets in poor countries that have been forced to liberalize imports – such flexibility will be necessary for safeguarding both the rural citizens and less environmentally destructive farming practices.

Furthermore, every citizen has a birthright to water as well as health care and education. Access to these common goods is not a matter of choice, but a necessity. People have no alternative when prices rise beyond their reach. Therefore, the provision of these goods cannot be left to markets. The human community has the obligation to ensure universal access for all its members to these goods. From this perspective, transnational privatization of water delivery and basic services, as presently discussed under WTO, is likely to turn into a social disaster. Since the poor bring little purchasing power to bear, it is likely that they will be the first to lose out. Privatization must therefore be subordinated to the common good. In consequence, unregulated cross-border competition must be carefully circumscribed in scope. In order to serve livelihoods and sustainability, free trade must be given appropriate place in the wider context of public policy.

Give priority to environmental treaties over trade agreements

Two years after the Rio Conference, the Uruguay Round was brought to an end by the establishment of

the WTO. The final text of the Uruguay Agreement was over 26,000 pages long (mainly detailed tariffs and service schedules). In comparison, the 273-page *Agenda 21* reads like a brief call to action. The Uruguay Round negotiators made little effort to incorporate the Rio commitments into their deliberations. Indeed, many WTO provisions contradict the spirit and in some cases the letter of the Rio conventions and other environmental accords. In addition, environmental treaties generally include non-binding and voluntary dispute resolution procedures, in contrast to the WTO's system of binding rules that are ultimately enforceable by trade sanctions.

Several environmental treaties, including the Montreal Protocol, CITES, and the recently agreed bio-safety protocol, contain provisions that arguably are at odds with WTO rules. These inconsistencies stem from different philosophical underpinnings: environmental treaties aim to curb harmful forms of commerce, such as trade in endangered species and hazardous wastes, whereas the WTO is in the business of tearing down barriers to the flow of goods across borders. Although no country has thus far lodged a formal WTO challenge against the provisions of a multilateral environmental agreement, arguments about WTO consistency often arise during environmental treaty negotiations. These tensions, for example, were much evident during the negotiations on the Cartagena Biosafety Protocol, which, even in the face of scientific uncertainty, endorses the need to take precautionary steps against unregulated trans-border trade when the possibility of irreversible harm arises.

One way to respond to the power imbalance between the more enforceable rules of the WTO and the comparatively weak environmental treaties, would be to give the latter sanctioning powers similar to the WTO's. The UN Law of the Sea, for example, created an International Tribunal as one of several possible vehicles for resolving disputes about implementation and compliance. That body is empowered to impose fines and other penalties in case an actor is found to be in violation of the terms of the agreement. Another reform urgently needed is to amend the environmental exceptions to the WTO in order to clarify that trade measures taken pursuant to Multilateral Environmental Agreements (MEAs) should be protected from challenge at the trade body. Such a provision would enable MEAs to enact rules for economic activities across borders. This would, in turn, ensure that the sustainable development imperative had priority over

economic efficiency, and that the common good trumps corporate good.

Widen the space of political autonomy

Article XX of GATT/WTO allows countries to regulate trade if necessary to protect human, animal or plant life or if regulation relates to the conservation of exhaustible natural resources. However, two important conditions are attached to this exception. Firstly, trade restrictions can only be based on physical characteristics inherent to import products, but not on those inherent to production processes abroad. Governments are not allowed to address a collective preference for such issues as which chemicals are used to produce an item of clothing, whether wood products come from forest clearance areas, or if genetic engineering methods are applied to grow crops. Secondly, trade measures must be based on scientific principles and sufficient scientific evidence. Imports can only be regulated in case of risk, and the presence of risk has to be demonstrated by the importing country through scientific evidence. As a result of these conditions, several national environmental and consumer laws have been declared unfair trade barriers at the WTO, including a European Union law that bans the sale of beef produced with growth hormones, and a US law that aims to protect endangered sea turtles by restricting imports of shrimp caught in nets without turtle excluder devices.

There are two different roads for overcoming the WTO barriers to sustainability. Either the organization comes up with environmental standards globally, or the space for political communities, usually represented by national governments, is widened to allow for the right environmental choices to be implemented. For reasons of democracy and subsidiarity, we favor the latter. From this perspective, countries need to be able to express public choices about non-desirable production processes through the governance of trade, otherwise the democratic option for sustainable production is annulled. Furthermore, countries should be able to act according to the precautionary principle.

If the space for democratic self-rule is widened for each country, fears of Northern protectionism against the South lose ground. While some countries may choose high standards for environment or human rights, others may want to manage trade for the sake of poverty alleviation or the development of new industries. Some are well-advised to do so, since no country, after the rise of Britain, has ever become

economically successful with markets unconditionally exposed to powerful actors from abroad. Both North and South must have the possibility to protect the public good; economic inefficiencies, which might slip in, will then be considered a minor evil. In any case, it is desirable that rules are not unilaterally adopted, but minimum standards multilaterally agreed upon by the parties involved. This would foster attention to mutual interests, rather than to individual victory. And it would fit into a long-term vision that sees the world trading system structured by cooperation between countries, rather than by competition between corporations.

Treat environmental non-cooperation an unfair subsidy

The WTO is about creating an even playing field between foreign and domestic producers. However, an up-to-date trading system should be about creating an even playing field between environmentally sound and environmentally destructive production. But this is not the case: everywhere, the playing field is skewed, to allow an extractive economy to enjoy massive advantages. Public money, for instance, as noted in the previous chapter, often helps to ruin the environment. The WTO could adopt play a more constructive role if it enacted the reduction and gradual elimination of environmentally perverse subsidies worldwide, in order to give an equal chance to sustainable production.

Governments are notorious for sacrificing sustainability to short-term interests, when it comes to export promotion. To offer export credits for investments abroad is a common practice in industrial countries. In fact, a great deal of foreign direct investments in Southern and Eastern countries are facilitated by these schemes. Until now, OECD governments have failed to agree on some minimum environmental and social standards for such capital flows. More often than not, harmful investments are supported by OECD taxpayers' money with the tacit approval of many Southern and Eastern governments. Governed by a sustainability agenda, the WTO could initiate a Multilateral Agreement on Sustainable Investment that establishes verifiable guidelines for foreign direct investments. A WTO sensitive to the common good would not promote the liberalization of any investment, but an even playing field for socially and environmentally sound investments only.

Furthermore, the failure to adhere to a multilateral environmental agreement (MEA) should be

Countries need to be able to express public choices about non-desirable production processes through the governance of trade.

considered an unfair subsidy to domestic industry. Foreign competitors, who might have to comply with rules deriving from the MEA, may be at a disadvantage. For instance, the Convention on Biological Diversity has been in force since 1993. It has been ratified by 182 parties, but not by the US, which has only signed it. As a consequence, the US, the most important actor in biotechnology worldwide, enjoys the rights of access as stated in the Convention, but fails to recognize the corresponding duties, i.e. the duty to conserve and use biodiversity equitably and sustainably. Moreover, the US is the only country which has declined to participate in the Kyoto Protocol. In our opinion, this non-cooperation amounts to a hidden subsidy for the US industry on the world market. Since the rest of the world community is put at a competitive disadvantage if the US remains exempt from reductions, such a situation is inconsistent with the WTO philosophy.

Negotiate a Convention on Corporate Accountability

Over the last decades, as corporations have increasingly expanded their activities beyond national borders, the ability of states to safeguard the public interest has diminished. To date there is no framework of laws and standards to hold transnational corporations accountable to citizens in all the countries where they operate. Nevertheless, global standard setting is advancing in the areas of human rights, workplace standards and environmental protection and restoration – whether voluntary or via binding protocols and treaties.

Move from voluntary to verifiable guidelines

In the ten years since Rio, a dramatic change in environmental reporting has been achieved. Large corporations are routinely expected to report with varying degrees of rigor about their environmental progress or at least their environmental goals and principles. Some companies, particularly in Europe, have added social audits or indicators as part of their sustainable development reporting. These and other initiatives have been brought about in part through voluntary initiatives, stakeholder dialogue, NGO activism, and public/private debate and partnerships. They range from the UN Secretary-General's UN Global Compact to the accounting standards being developed and promulgated by the Global Reporting Initiative for Triple-Bottom Line corporate auditing

and accounting practices, to such socially-responsible and sustainability stock indices as the Dow Jones Sustainability Group Index, and the Calvert Social Index.

While some companies have made great improvements in their manufacturing, labor, and procurement practices, the overall business report card since Rio is negative. Initiatives such as the UN Global Compact and the Global Reporting Initiative (GRI), with all their good intentions, may lead the process astray. The United Nations Global Compact launched by Kofi Annan invites TNCs to engage with its nine principles of good corporate citizenship in human rights, labor standards and environmental protection, but it is voluntary and lacks compliance or performance criteria, even if the signatory companies are receiving additional scrutiny by NGOs and socially responsible asset management firms. While the UN initiative represents a positive global platform for learning and the exchange of views, its *raison d'être* is clearly stated on its home page: "In the months since the world trade talks in Seattle, more and more businesses and organizational leaders are recognizing the importance of the Global Compact as a means to address social problems and to keep world markets open." It is doubtful that keeping world markets open is the proper starting point to achieve corporate social accountability.

Furthermore, the Global Reporting Initiative (GRI), a collaboration between UNEP and CERES, promotes "triple bottom line" accounting, i.e. economic, social, and environmental accounting. Progress along similar lines has been made by the movements of socially-responsible investors, which in the USA alone hold \$2.1 trillion of the shares of companies that "pass" such triple-bottom line accounting. However, the GRI standards were renamed "sustainability reporting standards" without defining what sustainability means with respect to social justice, common rights, livelihood, or global environmental metrics. There was in fact no consultation with the South as to the meaning or interpretation of the term. While such initiatives are admirable unto themselves, they supplied goodwill to corporations while arguably marginalizing reforms that would universalize social accountability standards.

Corporations have been fairly united in claiming that voluntary codes of conduct are sufficient to engage the business community to become socially and environmentally responsible. The authors of this

report, however, do not agree with that assertion. We believe that the emphasis on voluntary codes draws attention away from the reforms that would truly change business activity and behavior. Further, there is a profound imbalance between multilateral trade agreements which have punitive and judicial teeth, multilateral environmental agreements which are largely unenforceable, and voluntary codes of corporate conduct which are just that – voluntary.

Launch a convention on corporate accountability

Voluntary initiatives are laudable but they cannot substitute for verifiable rules that establish a baseline of rights, duties, and consistent behaviour. In this light, a convention on corporate accountability, as recently proposed by Friends of the Earth International (2002) should include mechanisms that allow adversely affected right-holders to obtain redress. Affected individuals should be given legal standing to challenge parent corporations where they are domiciled. Such a convention should further identify social and environmental duties for corporations. These duties may include reporting on environmental and social performance in a verifiable fashion, seeking prior informed consent from affected communities, and taking into account not just the interests of shareholders, but of other stakeholders as well. And finally, the convention should define rules for consistently high standards of behavior wherever corporations operate. Such rules should be based on the principles enshrined in international environmental, social and human rights agreements.

Create a Framework for Socially Accountable Production

The term socially responsible corporation creates a contextual misunderstanding, as if the framework of sustainable development and socially responsible activities rested within the corporation. In fact, the context of sustainability is production itself, regardless of the source or scale. To that end, we propose the creation of a framework for socially accountable production. It would encompass all commercial activity, from the smallest enterprise to the largest corporation, but also include government, farmers, householders, herdsman and fisher folk. If we are to achieve real wealth for all people on earth, the mechanisms whereby wealth is created and produced must align with social values, human rights, and scientific principles with respect to biology and ecology. With

this framework it would be possible to examine whether an actor is producing goods or services in a manner that honors our common rights and our natural heritage. Moreover, it would ensure the creation of the needed mechanisms and regulatory feedback that will bring about real progress with respect to social welfare and environmental sustainability. As part of such a convention, we propose that the following imperatives be included:

Redefine social responsibility

Environmental and social responsibility requires responding to and preventing damage to the commu-

Markets and Common Good

- **Go for fair trade, not for free trade. Calling for unlimited access to Northern markets is self-defeating unless small producers and sustainable agriculture benefit. To protect livelihood rights, fair trade agreements between producer and consumer countries are needed.**
- **Reframe WTO sustainably by broadening political space of nations in trade policy. True democratic self-rule requires citizenry's voice in sustainability and livelihood politics. This enables public to express its choices about the scope & quality of trade.**
- **Trade measures pursuant to MEA's should be protected from WTO challenge.**
- **WTO should enact the gradual elimination of environmentally harmful subsidies in order to give an equal chance to sustainable production and livelihoods.**
- **Move towards a Framework for Socially Accountable Production grounded in principles, such as broadened social responsibility; precedence for rightholders; freedom of information; broadened corporate liability and precautionary principle.**
- **Launch a Convention on Corporate Accountability as the world society has a right to accountability in terms of environmental, social, and human rights from transnational corporations and voluntary codes of conduct such as the Global Compact or the Global Reporting Initiative are just not enough.**

nity of life on all levels. The community of life includes, but is not limited to culture, livelihood rights, the right to clean water, biota, land use, subsidiarity, subsistence rights, the right to an environment free of toxic and hazardous materials, and the right to create a viable food chain within the limits of one's environment.

Moreover, any framework that speaks to sustainability must address the Kantian imperative: What if everybody did it? The recognition that the global commons belongs to no nation but all people, is an essential pre-condition to the creation of mechanisms to assess whether production activity is moving society towards sustainability or towards increasing polarization of wealth and loss of capacity.

Give rights holders precedence over stakeholders

We believe that rights holders have precedence over stakeholders. Increasingly, corporations engage in stakeholder dialogues to iron out or discuss controversial issues, as if all stakeholders were equal. We believe that cultures of place have *a priori* rights superceding the "rights" of the market, and that effective mechanisms need to be instituted to protect these basic human rights. More specifically, while producers are a critically important actor in society, their voice must not be given disproportionate weight in matters of governance. To that end, the issues of the finance reform of political campaigns and political corruption need to be addressed systematically. It is not possible to create a sustainable society in which business governs and the governing sector is bound by business.

Ensure freedom of information on production processes

The Århus Convention, referred to earlier, recognized for the first time basic environmental rights, such as the right to information, participation, and access to justice. In the context of these principles, we believe that there should be universal freedom of information with respect to any and all production processes, whether they originate in institutions, cities, the private sector or in the countryside. We also call for public hearings on issues that affect common rights and that access to justice should be available to all. These rights are essential to prevent market forces from willfully or unintentionally destroying environment and culture.

Move beyond limited liability

We do not believe that the principle of limited liability is an effective means to guarantee adherence to social and environmental law and standards. The main feedback loop determining business activity is financial. Since the rights that require protection cannot be monetized, there needs to be a direct and foolproof way to create performance and responsiveness from top management. CEO liability for accuracy in social reporting would be one such mechanism.

Put the precautionary principle center stage

We believe the precautionary principle is a universal right. Technologies, processes, materials, chemicals, and products must be proven safe prior to their introduction to the market, and the onus of proof lies with the producer, not the buyer. Where there is uncertainty, ignorance, or lack of knowledge of long-term consequences, citizens have a right to prevent the possibility of irreversible or cumulative harm. This means they have the right to consider a range of alternatives including the alternative of taking no action.

To sum up, we are proposing that the principles of socially accountable production be placed within a framework of rights and responsibilities. In the past decade, the means for producers to shift production to sustainable methods has been widely documented and the options for doing so continue to expand. Yet the technical means to reduce environmental impact by themselves do not create societies that are just, equitable or sustainable. In order for societies and producers to work together to create mutually reinforcing activities that not only sustain people and places, but restore what is lost and can be recovered, a rights-based system is needed. This will include the right to know, the right to monitor, the right to products that do not harm ourselves or anyone else or place, consumer rights, placing consumption within a broader cultural context, and more. Commercial growth and expansion will not address poverty and deprivation unless economic growth is rooted in fundamental human rights that transcend codes of commerce.

5.5 Restructuring Financial Architecture

Reforming global financial institutions is vital to poverty reduction, sustainable development and the environment. Today's global financial system is the main flywheel of both social and environmental destruction, while exacerbating the gap between rich and poor.

Cool Out Hot Money

G7 finance ministers and central bankers have called for a New Global Financial Architecture repeatedly since the Asian financial crises of 1997. Even after the crises that followed in 1998, involving Russia, then continuing with Brazil, Turkey and Argentina into 2002, official rhetoric has not been matched by results. The continuing agony of Argentina, a country rich in human, social and environmental capital, is an example of the failures of the Washington Consensus – exacerbated by an over-valued US dollar as the world's *de facto* reserve currency. The US dollar was never designed for such a role and this global dollar-regime is clearly unsustainable.

The hegemonic role of the still-overvalued US dollar as a *de facto* global reserve currency is still creating serious imbalances and threatens other currencies tied to it, as witnessed by the Argentine default. The USA in the 1990s had been a magnet for the world's flight capital and remain so in spite of the bursting of the "new economy" bubble. A more stable global currency regime is essential to curbing today's turbulences. Some developing countries, including China and Venezuela, have realized the need to diversify their currency reserves out of dollars and into euros. This is a peaceful, global "win-win" strategy for steadying today's currency imbalances. The need to regulate global capital markets is well recognized – together with a new approach to a global reserve currency, for example, a dollar-euro parity regime, buttressed by SDR issues. Parity between the euro and the dollar would offer the G7 the opportunity to peg these two major world currencies in a trading band. This would add greatly to stability in global currency markets. It is an open question whether OPEC will redenominate its oil in euros – another move that would help shift the dollar and euro towards closer parity.

Finance, which is supposed to serve the world's real production and exchange processes, has become largely delinked from the down-to-earth "bricks and

mortar" economies of local places and communities. Increasingly, money flows are divorced from national policy-makers and local affairs, grass-roots lives as well as natural systems. Taming the global casino of unregulated financial trading is an urgent task. In particular, short-term hot money flows (currencies and portfolio investments) have become the transmission belts of ecological and livelihood destruction, disruption of domestic, social/economic policies in many countries. These financial flows are far more crucial to the sustainable development agenda than trade – since they dwarf the 10% global trade-related transactions, in the \$1.5 trillion total of daily currency exchange.

It is the speculative 90% of these daily \$1.5 trillion flows that are unrelated to trade, which proposals for currency exchange taxes seek to address. At the UN Social Summit in Geneva, June 2000, 160 governments agreed to perform feasibility studies on currency exchange taxes, including the Tobin tax which provides for a very small (0.05 percent or less) fee on all currency trades. There are many other ways of collecting such taxes. Estimates of revenues from even 0.01% currency exchange taxes range from \$50 billion to \$300 billion annually.

Relieve the Debt Burden

Unrepayable debts constrict political breathing space. Debt relief is therefore an essential step

Restructuring Financial Architecture

- Cool out hot money as financial turbulences fuel social and environmental destruction. Currency markets stability urgently requires to de-monopolize dollar as global reserve currency. A currency exchange tax would dampen short-term speculation.
- Relieve the debt burden and keep in mind the importance of ecological debt incurred by the North on the South throughout centuries over the recent financial debts. Reorient the IMF: provide bankruptcy protection and dismantle structural adjustment programs.
- Facilitate barter trade, electronically.

towards restoring space for political initiative in weaker countries. To a great extent, the unrepayable debts of Highly Indebted Poor Countries (HIPC) are deemed “odious,” i.e., they were incurred in corrupt deals between politicians and their corporate and financial cronies – and should be repudiated. Because of high levels of debt, governments are often forced to ignore human rights and to subordinate the needs of their people to the interests of foreign creditors. The rapid reduction of unrepayable debt is thus necessary – but not sufficient to build a basis for alternative paths to sustainability. In addition, many indebted developing countries may seek bankruptcy protection. The most appropriate model is that of Chapter 9 of the US Bankruptcy Law, which covers municipal bankruptcies. It allows the continuation of all social programs, services and public expenditures, and therefore provides an effective way to protect the vulnerable and poor populations of those countries seeking protection under this law.

The elimination of structural adjustment programs is equally essential. Cosmetically renamed “poverty reduction” programs, they have imposed many inappropriate conditionalities based on Washington Consensus orthodoxies. Both the IMF and the World Bank need to be re-directed, democratized and re-structured for more limited missions, and made transparent and accountable to all countries – not only to their rich shareholders. In any case, it must be recognized that the ecological debt with consequential financial gains accumulated by the North throughout centuries is of greater relevance than the financial debt accumulated by the South recently. Turning a blind eye to the history of appropriation of nature while pitilessly collecting financial debts today, only reflects the hypocrisy of the stronger.

Consider Barter Trade

Barter has been the economic living grounds of the 2 billion human beings who are not part of monetized and urbanized economies. Countries used payments unions, such as the Soviet Union’s COMECON system prior to its collapse in 1991, while corporations routinely exchange an estimated \$1 trillion worth of goods and services annually, both domestically and internationally. All this was inefficient – and cumbersome – prior to computers and the Internet. Today, it’s a snap – and barter has several advantages over currency-based trading. Barter enables resource and

commodity based economies to trade directly with each other – without first needing to earn or hold foreign exchange in key currencies. Governments, for instance, can procure needed capital goods, infrastructure components, etc., by bartering with each other – just as corporations barter media time, bandwidth, airline seats, hotel rooms, equipment and a host of other goods and services. All this can be facilitated with robust computer software that can handle different countries’ tax regimes, and all the requisite back-office clearing and settlement systems for this type of information-based, credit-trading.

Economists tend to dismiss barter as “primitive” – as their textbooks teach – but it will be Internet barter companies and real traders in real commodities that will prove those textbooks obsolete. How can barter be facilitated among the world’s 2 billion people outside money-systems? They are not “poor” (which is what economists call people without currencies). These 2 billion people are richly resourceful, often living sustainable lives. Today, off-grid, solar-powered micro-generators, such as those being supplied to rural villages in Africa and Asia, provide connectivity. Barter menus, from global to local can be accessed via cheap hand-held devices. Villagers may find a local menu of barter partners and few need to make a long trip to a market town with little assurance of selling their produce.

Today, anyone short of official national currencies can engage in as much barter as necessary. These include high-tech exchanges using personal computers, local exchange trading systems (LETS) and the many kinds of local scrip currencies now circulating in hundreds of towns in the USA, Europe, and other OECD countries. These tools can complement scarce national currencies where monetary policy is ill-conceived or too restrictive, so as to help clear local markets, employ local people, and provide them with an alternative local, purchasing power. In short, no poverty-reduction strategy will be complete without barter.

The ecological debt accumulated by the North is of greater relevance than the financial debt accumulated by the South.

5.6 Facilitating Institutions

As awareness of the bio-physical constraints to growth has finally emerged, institutions responding to this shift in the historical condition are called for. Today, besides peace, the environmental challenge is the most essential issue around which the entire UN system should revolve.

Move Towards a World Environment Organization

Mistakes, once committed, tend to endure. Already the 1972 UN Conference on the Human Environment in Stockholm, had failed to build a solid institutional base for addressing environmental issues within the UN family of organizations. UNEP, the first major international environmental institution, was a child of the 1972 Conference, and was supposed to stay small forever. As a simple program of ECOSOC and not an independent organization of the United Nations, UNEP was expected to act as an initiator and coordinator for other organizations, without an autonomous budget nor programs of its own. Institutionally, therefore, Stockholm left only a rather small legacy.

The set-up did not change in Rio. Instead, confusion was added to weakness. Here as well, the institutional outcome of the 1992 Conference, the Commission on Sustainable Development, was not designed to lend authority to environment and development issues. The CSD developed into a forum of opinion-building for governments and stakeholders, wide-ranging and participative, but without decision-making or implementation power. Apart from the CSD, a string of conventions and treaties emerged as well, but without mutual coordination, which in turn fragmented rather than consolidated institutional coherence. Institutionally, therefore, Rio left a rather confused legacy.

As a result, environmental concerns are surprisingly under-institutionalized at the multilateral level. They are insufficiently embedded into institutional power and operative competence. It is therefore not astonishing that the issue of bio-physical limits has never become a defining issue for the UN, although, admittedly, a number of specialized agencies have taken environmental questions on board. Further, the weaker presence of environmental issues among UN organizations contributed to the focal shift from the UN institutions to the Bretton Wood institutions in

the 1990s. While UN institutions stand for public values such as peace, human rights, and cooperation, the trinity of World Bank, IMF and WTO embodies economic values of competitiveness, currency stability and open markets. This shift in favor of economic values came in the wake of corporate-led globalization, while the human rights-centered globalization of the UN receded into the background. Any institutional attempt to rebalance social, environmental and economic values is bound to improve the overall profile of the environment.

At present, environmental governance is weak, fragmented and generally ineffective. Admittedly, the rather chaotic, bottom-up process which has so far characterized environmental governance tends to be flexible and less controllable by a superior authority, but time might now be ripe to develop clearer structures that would deepen commitment, focus efforts, and enjoy parity with both UN and Bretton Wood institutions. Only a balance between a plurality of institutions will guarantee a balance between a plurality of objectives, be they social, environmental or economic ones. No system of checks and balances can be installed unless organizations like the ILO, the WHO, and the WTO are joined by an environmental organization of equal standing.

Furthermore, too much fragmentation undermines effectiveness. There are now over 500 international treaties and agreements related to the environment, more than 300 of which have been adopted since Stockholm 1972, and 41 of which are considered core conventions (UNEP 2001). As the number of treaties has increased, problems of duplication and lack of coordination have arisen. Besides, each treaty creates its own mini-institutional machinery, including annual meetings and secretariats, which are scattered around the world, causing international environmental diplomacy to resemble at times a moving circus. Finally, the outreach in particular to Southern countries appears to be sketchy. The activities of UNDP notwithstanding, capacity building in environmental affairs cannot be taken for granted, although agreements increasingly presuppose the necessary competence. There is also no organizational setting, except perhaps the Global Environmental Facility, for the multiple financial transfers linked to environmental agreements. In both respects, an environmental organization could provide stability and transparency for North-South transfers.

Renewables will have the potential to satisfy the actual world energy demand many times over.

To strengthen environmental concerns within the architecture of global governance we suggest upgrading UNEP into a World Environment Organization. Such a body should have its own budget, its own sources of reliable funding, its own legal personality, increased financial and staff resources, expanded competence, and an adequate governance structure. Funds could come from member governments and from new sources such as user fees on global commons. The elevation of UNEP to a World Environment Organization could be modeled either on the WHO and the ILO or on the UN Conference on Trade and Development (UNCTAD), a body established by the UN General Assembly for debate and cooperation on international trade policy. Apart from UNEP, the organization could integrate the relevant convention secretariats. Its main areas of activity would be to coordinate global environmental governance, oversee capacity building and transfers, and support the definition of multilateral standards and agreements.

However, it should be emphasized that the organization should be horizontal in character rather than hierarchical. It will be an institution of cooperative governance, and not an institution of global government. Its decision-making structure should be governed by a North-South parity system requiring a simple majority from either side.

Establish an International Renewable Energy Agency

Moving towards solar economies worldwide implies a fundamental shift in the resource base of society. Eventually, the demand for energy and raw materials will be met from solar sources of energy and solar raw materials. Already now, a host of renewable energy technologies are available, including thermal and photovoltaic solar energy, wind power, regenerative biomass, wave as well as tidal power, and small hydro-electric power systems. As is well known, a transition to renewable energies is the regal road towards sustainability; they are climate-friendly, pollution-free and inexhaustible.

Sunlight is most abundant where the majority of the world's poorest people live. Numerous studies have shown that, if efficiently used, insolation and biomass are sufficiently available to support a decent level of well-being continuously, indefinitely, and economically, everywhere on the globe. Indeed, in the future, renewables will have the potential to satisfy

the actual world energy demand many times over. It is therefore only on the basis of renewables that Southern and transitional countries will be able to meet their growing energy needs. Besides, these technologies reduce the dependence on primary energy imports and save money usually spent on the infrastructure needed to distribute conventional forms of energy. In fact, renewable energy can be collected and converted for use at the very location where energy is needed. It is the only way to make power available without forbidding costs, since expensive energy grids will not have to be built and no long-distance transport is required. This is crucial, given that two billion people currently live in areas with no access to power grids.

Industrial countries – and the urban-industrial poles in many developing countries – face an analogous challenge, only from a different point of departure. Locked as they are in systems of conventional energy supply, they will have to back out of this dead end and embark upon a full-scale transformation of their resource base.

Recently, several such countries have demonstrated that high growth rates for renewable energies are possible when a favorable political framework exists. Incentives have been offered to stimulate manufacturing of renewable supply technologies at a large scale. If the use of renewables can be rendered economically viable, the market for them will expand. This has been achieved in several European countries by feed-in laws, which set the price at which grid operators have to purchase electricity produced by independent, decentralized producers. As a result, new production outlets have been built, and major cost reductions have been achieved. Experiences in Germany, Spain, Finland and Austria suggest that a shift to renewables could be achieved in the course of a few decades. Moreover, the same experiences indicate that such a shift will not imply higher economic cost at the macro scale, but rather additional benefits, such as less damages caused by fossil and nuclear energy, less unemployment, independence from fuel imports, and greater supply security.

Since the transition to renewable fuels and materials must occur quickly and on a broad scale, there should be a specialized international agency created for this purpose. The proposal is for the establishment of an "International Renewable Energy Agency (IRENA)". Such a proposal was first launched in 1980 by the North-South Commission,

presided over by Willy Brandt, and more recently promoted by EUROSOLAR. The organization describes the tasks of IRENA as follows:

- drawing up national programs for the introduction of renewable energies;
- supporting education, training, and the dissemination of information about renewables;
- implementing training activities for administrators, technicians, craftsmen and for small and medium enterprises;
- the cooperative foundation of regional centers of research, development and transfer of technologies of renewable energy;
- evaluating and processing information on applied technology and best practice experience;
- advising on and arranging financing options for renewables;
- collecting data and drawing up statistics.

It is advisable to set up such an agency in a decentralized fashion, following the model of the CGIAR, the institutes of agricultural research working under the auspices of the UN in different locations around the world. Interestingly, the International Atomic Energy Agency (IAEA), which was established in 1958, had among its tasks the non-commercial transfer of nuclear technology. What was deemed necessary at the time is now imperative for renewable energies. Indeed, as nuclear is obsolete, IRENA may well replace the IAEA one day. Furthermore, IRENA will have to be independent of economic interests and be financed by member countries. As with the founding of the IAEA, a movement on the part of just a handful of governments suffices for the creation of such an agency, which would offer membership to all interested nations. By putting its basic commitments into practice, the agency can establish a positive reputation and thus attract new member countries.

Transpose Dispute Resolution – International Court of Arbitration

Global society, not unlike national societies, is pervaded by conflicts. As nations and corporations, communities and individuals bring extraordinarily diverse experiences, interests and worldviews to bear on the global stage, conflict cannot be dreamed away; on the contrary, conflicts generate the upheavals, alliances, and ideologies of that amalgam called global society. There is no universal way of seeing;

there are only context-bound viewpoints that offer particular perspectives. Any architecture of global governance is therefore well-advised to start with the assumption that conflicts bubbling up from society are neither avoidable nor finally resolvable. In the best case, they can be identified before turning violent, peacefully settled, and redirected into a productive tension.

Liberal democracies have known that all along. For this reason, their political framework is based on institutions of conflict management. Parliaments, courts, and a debating public are the cornerstones of an order that aims at regulating conflicts rather than eliminating them. It is striking that there is a dearth of such institutions at the global level. Moreover, liberal states have adopted the principle of separation of powers, which, by dividing legislative, executive, and judicial powers, constrains authority with a system of checks and balances. This separation of powers too, is still rudimentary, and in most cases non-existent at the global level.

The World Trade Organization has staked out its claim in this gap. It has for all practical purposes become the supreme governance authority, one that implicitly distills legislative, executive, and judicial functions into one single institution. On a very straightforward level, trade affects everybody, but WTO committees are mainly populated by state representatives, economists, and males. By merely

Facilitating Institutions

- **Move towards World Environment Organization. Initially, UNEP could be upgraded to be transformed into an institution of cooperative governance integrating convention secretariats.**
- **Create an International Renewable Energy Agency. The shift to a renewable resource base is a worldwide task which should be promoted by a suitable decentralized institution.**
- **Refashion dispute resolution by global level endorsement of the principle of separation of powers. The Permanent Court of Arbitration and its environmental rules provide an advanced mechanism for settling international environmental disputes, including conflicts between trade and environmental law.**

The WTO usurps the competence to judge not only on trade, but on broad aspects of public life.

shaking up this composition and opening decision-making on trade to politicians, non-economists, and women, the picture would be markedly different; the world would cease to be dominated by the single worldview of neo-classical economics.

However, above all on an institutional level, the authority of the WTO derives from its dispute settlement system. Not only are the judges on the dispute panels appointed by the WTO and chosen for their trade background rather than for their social or environmental expertise (often required by the subject matter of the case), but it is a settlement system with teeth. The ruling of the Dispute Settlement Body is automatically adopted by the whole membership, and non-compliant countries face fines or punitive trade measures. Only consensus can overturn such a final decision; a situation that calls into question whether standards of due process are lacking. With this powerful instrument at hand, the WTO Dispute Settlement system makes pronouncements which affect areas beyond its mandate, namely environmental, social, and human rights matters, by redefining them as trade-relevant issues.

Thereby, the WTO usurps the competence to judge not only on trade, but on broad aspects of public life. While the WTO competence needs to be scaled down, the competence of the UN system and organizations like the International Labor Organization, the World Health Organization and eventually the World Environment Organization will have to be expanded. It is high time to restore a true balance of power between the two conflicting sets of global institutions, the WTO (along with World Bank and IMF) on the one side and the UN system on the other.

Conflicts are inevitable, therefore a supranational judicial body is needed for the impartial resolution of competing concerns. We argue for moving certain disputes out of the WTO Dispute Settlement system into an international court of arbitration.

Such a court already exists: the century-old Permanent Court of Arbitration in the Hague. In fact, taking into account the *lacunae* in existing dispute settlement mechanisms such as the WTO, the 94 Member States of the PCA adopted "Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment" in June 2001. The PCA and its Environmental Rules have the following features:

- Not only states can bring cases to the PCA, but also any combination and number of non-state actors, such as intergovernmental and non-gov-

ernmental organizations, corporations, and private parties.

- Parties voluntarily agree to enter arbitration and to accept outcomes as binding. They agree to settle a dispute on any issue, and may refer to provisions in existing contracts, agreements, conventions, etc., in relation to which or out of which a dispute arises. Consent to arbitrate may be given prior to the dispute in a contract or treaty, but may also be given *ad hoc* pursuant to a submission agreement.
- Arbitrators are chosen case by case. A list of experts in environmental law to draw from in selecting an arbitrator is available, as is a list of environmental science experts to assist the tribunal.
- The arbitral tribunal hears cases on the basis of statements by the claimant and the defense, possible witnesses, documents, and other kinds of evidence.
- The tribunal may order interim measures of protection falling within the subject matter of the dispute to preserve the rights of any party or to prevent serious harm to the environment falling within the subject matter of the dispute.
- The arbitral award is enforceable through national courts.

Because the PCA Environmental Rules can deal with questions of interpretation of the universe of environmental agreements, ensure access to justice for the global society, and offer access to environmental legal and scientific expertise, they represent the most advanced mechanism currently available for settling international environmental and/or natural resources disputes.

5.7 A Johannesburg "Deal"

On the eve of the UN Conference on Finance and Development at Monterrey in March 2002, the Secretary-General of the United Nations, Kofi Annan, suggested a "Global Deal" between industrialized and less industrialized countries (New York Times, March 21, 2002). We believe the proposal of a global deal is timely. It reflects that North-South relations, today more than ever, are marked by mutual interests and not developmental charity or self-pity. In a world where distances shrink and events are witnessed everywhere in real time, interdependence deepens. Furthermore, the unification of the world increasingly shows its seamy side: the globalization of "goods" is accompanied by the globalization of "bads". Pernicious environmental repercussions, gloomy financial disasters and trade imbalances, and the most recent terrorist attacks demonstrate that even the most powerful nations on Earth have become vulnerable to impacts from beyond their borders. States have lost the power to provide security and protect the welfare of their citizens. Indeed, they need to engage in supranational agreements to bind their interests to the interests of other states. Recognizing this constellation of mutual vulnerability, the proposal of a "Global Deal" seeks to forge a pact between the stronger and the weaker for a common, more secure future.

However, the way the Secretary-General outlines such a deal poses some questions. The deal basically goes as follows. On the one hand, Southern countries are supposed to promote market-oriented policies, strengthen institutions, fight corruption, recognize human rights and fight poverty. On the other hand, Northern countries can in turn be expected to support Southern countries through trade policy, assistance, investments and debt relief. Though some elements in this deal are pertinent for improving the situation in the South, the content of the deal can still be questioned in at least three ways. First, there is an implicit assumption that the North is right and the South is wrong, which allows policymakers to posit good behavior on part of the South as a condition for support from the North. Second, the deal emphasizes increased money flows rather than structural changes in the architecture of the transnational economy. And third, the deal – and here the term "deal" is revealing – is cast as a mutually convenient agreement between different state interests, but not in terms of people's rights. In its content, the deal still carries the

mark of a developmentalist world where Southern countries are supposed to catch up in maturity, supported by a transfer of capital and expertise from the North.

We suggest that the global deal be reconceptualized under different terms. First of all, seen in light of the overall goal of sustainability, the North, the South and so-called transition countries certainly have different but not unequal points of departure. The North is most unsustainable in resource consumption, and the South is most unsustainable with regard to poverty and misery. The former must reduce its ecological footprint, while the latter must ensure livelihood rights for the marginalized majority. The first challenge implies a major restructuring of production and consumption patterns, while the second challenge implies a change in the inequality of power within and between countries. However, the South does not owe anything to the North, while the North owes something to the South. The responsibility of present Southern governments for the fate of their people notwithstanding, during the long history of colonization the North has accumulated a debt toward the South, in both ecological and economic terms. Given this debt, the North should offer reparations in the form of support to the South. This support would facilitate a transition to sustainability in both senses, by improving people's quality of life and by moving toward a resource-light economy. Finally, the transition to sustainability requires a framework of rights and, to a lesser degree, funds and expertise. Community rights and citizen rights are essential for empowerment, while the common public values of ecology and equity must prevail over the value of individual economic efficiency in trade relations. To put it in a nutshell, restraint (in resource use and the exercise of power), reparation (from North to South), and rights (for citizens, communities and national societies) are the conceptual coordinates for framing a global deal.

In more concrete terms, the Johannesburg Conference offers a unique opportunity to put into motion a broad agreement between North and South. Such a project could build on a proposal put forth by Denmark in 2001, which would balance commitments on the part of both the North and South in accordance with the principle of common but differentiated responsibilities. For a start, the North could offer (1)

a commitment not to increase absolute resource flows, (2) debt relief and (3) ecological assistance, while the South in turn could (1) agree to improve their Human Development Index and (2) accept commitments to environmental treaties and trade standards. Even if such a deal might be blocked by the US or other countries, there is no reason why it should not be launched among a pioneering group of selected Northern and Southern countries. Compacts do not need to be global; on the contrary, limited deals are both easier to negotiate and more likely to serve as trailblazers.

In any case, such a global deal is an initial stepping stone toward building a world society based not on violence and arbitrariness but on mutual responsibility and equal rights. It evokes the cosmopolitan dream of a world where all inhabitants enjoy fundamental rights by virtue of their human dignity, guaranteed by states in a cooperative effort. Indeed, in this era of globalization, one of the central tasks for governments is the securing of citizenship for all inhabitants on Earth. Consciously or unconsciously, Johannesburg will be measured against the hope of a flourishing life for all people. With the emergence of bio-physical limits, sustainability has become a cornerstone of world citizenship, because sustainability is not simply about frogs or forests but is fundamentally about human rights.

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Overview of Key Points and Recommendations

Part 1. Rio in Retrospect

- Rio gave a boost to environmental politics in governments and business worldwide. It laid the groundwork for international governance in biosphere politics.
- Rio increased the legitimacy of micro-level initiatives for sustainability in civil society, business, and municipalities.
- However, the North backtracked from the Rio Bargain, and the South continued to show scarce interest in environmental affairs. The overall health of the planet further deteriorated and global inequality increased.
- Meanwhile, governments prioritized WTO agenda over their Rio commitments, poised to create a borderless world market.
- Rio could not bid farewell from development-as-growth Philosophy. What kind of development, for whose benefit and in which direction are crucial distinctions when talking of sustainability.

Part 2. The Johannesburg Agenda

- Fixation on the historically obsolete development model of the North as if the crisis of nature did not exist means sliding back behind Rio and a disservice to the South since equity is can no longer be separated from ecology.
- The conventional distinctions between North and South are misleading – these are diplomatic artifacts. Instead, the real global divide runs through each society – between the globalised rich and the localized poor.
- Excessive use of environmental space withdraws resources from the world's marginalized majority. Fairness demands reducing the ecological footprint of the consumer classes in North and South.
- Poverty is a lack of power rather than of money. Reinforcing rights of the poor is the condition of poverty removal.
- Leapfrogging into the solar age is a chance to turn „underdevelopment“ into a blessing. A solar economy holds the prospect for including people and saving resources.

Part 3. Livelihood Rights

- Make environmental protection an integral part of poverty mitigation. As clean water, fertile soils, fish-

eries and forests secure livelihoods and health of the poor, so are the communities, once in control, stewards of nature. Make equity an integral part of nature conservation.

- Food security is linked to farmer security is linked to biodiversity.
- Women are pivotal guardians of local knowledge, skills for survival, biodiversity and cultural memory. Go for organic agriculture to avoid soil degradation and erosion of livelihoods.
- Renewable energies ensure livelihoods. Without them, woodlands get depleted or climate change looms.
- In cities, contaminated water, infected air, and dangerous housing threaten people's health. Move against pollution to improve the lives of the poor.

Part 4. Fair Wealth

- Poverty talk is common, wealth is taboo. Will the well-off be able to live without the surplus of environmental space they occupy today?
- De-intensify South to North material flows.
- Look beyond the Kyoto Protocol. Adopt a contraction and convergence approach, recognizing equal rights to the atmospheric commons.
- Include forests and water in international governance. Learn from the biodiversity convention the principle of fair access and equitable benefit sharing. Protect community knowledge systems on food and agriculture against the claims of governments and corporations. Whose knowledge is a free good and who turns it into patents to be paid?

Part 5

5.1 Community Rights

- Recognize rights to the natural habitat by incorporating them into national law. To have control over land, water, and seeds is a matter of human rights for communities.
- Initiate a Convention on Community Resources Rights. Resource conflicts are frequent between communities, state agencies and corporations. Fair access and equitable benefit-sharing are fundamental cornerstones of any international agreement.
- Establish a World Commission on Mining, Gas and Oil Extraction. Modeled after the World Commission

on Dams, representatives from communities, NGOs, business, and governments should review past experience in resource extraction projects and identify criteria for future decision-making, guided by a human rights framework.

5.2 Environmental Citizen Rights

- Promote citizens' rights. Not a restricted circle of experts, but a vibrant public sphere based on democratic rights is the best support system for sustainability.
- Globalize the Århus Convention as access to information is a precondition of vigilance. It ensures the right to participation, a precondition for citizen influence, and guarantees access to courts, an essential precondition for accountability.
- Reinforce the Rio principles of environmental management. Prevention of harm is key to pro-poor strategies and should precede over scientific evidence of damage. The Polluter-Pays Principle calls for strict liability along with obligatory insurance against risks.

5.3 Value in Nature

- Remove subsidies to resource extraction, transport, chemical agriculture as they suppress innovation, discourage conservation, and are environmentally harmful. These are forms of corporate welfare benefiting rather the already rich than the poor.
- Start international action towards full cost accounting shifting the tax base from labor to resources, pollution and waste ensuring right pricing of goods.
- Introduce user fees for global commons and feed the revenues back into measures protecting them. As open access favors overuse, fair charges for using the atmosphere, airspace, and the high seas would take pressure off the commons and encourage resource efficiency safeguarding them.

5.4 Markets and Common Good

- Go for fair trade, not for free trade. Calling for unlimited access to Northern markets is self-defeating unless small producers and sustainable agriculture benefit. To protect livelihood rights, fair trade agreements between producer and consumer countries are needed.
- Reframe WTO sustainably by broadening political space of nations in trade policy. True democratic self-rule requires citizenry's voice in sustainability and

livelihood politics. This enables public to express its choices about the scope and quality of trade.

- Trade measures pursuant to MEAs should be protected from WTO challenge.
- WTO should enact the gradual elimination of environmentally harmful subsidies in order to give an equal chance to sustainable production and livelihoods.
- Move towards a Framework for Socially Accountable Production grounded in principles such as, broadened social responsibility; precedence for right-holders; freedom of information; broadened corporate liability and precautionary principle.
- Launch a Convention on Corporate Accountability as the world society has a right to accountability in terms of environmental, social, and human rights from transnational corporations and voluntary codes of conduct such as the Global Compact or the Global Reporting Initiative are just not enough.

5.5 Restructuring Financial Architecture

- Cool out hot money as financial turbulences fuel social and environmental destruction. Currency markets stability urgently requires to de-monopolize dollar as global reserve currency. A currency exchange tax would dampen short-term speculation.
- Relieve the debt burden and keep in mind the importance of ecological debt incurred by the North on the South throughout centuries over the recent financial debts. Reorient IMF: provide bankruptcy protection and dismantle structural adjustment programs.
- Facilitate barter trade, electronically.

5.6 Facilitating Institutions

- Move towards a World Environment Organization. Initially, UNEP could be upgraded to be transformed into an institution of cooperative governance integrating CSD and convention secretariats.
- Create an International Renewable Energy Agency. The shift to a renewable resource base is a worldwide task which should be promoted by a suitable decentralized institution.
- Refashion dispute resolution by global level endorsement of the principle of separation of powers. The Permanent Court of Arbitration and its environmental rules provide an advanced mechanism for settling international environmental disputes, including conflicts between trade and environmental law.

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Biologist, author and activist. Many scientific and policy analysis contributions to the public debate on environmental protection, technology evaluation, and sustainable production and consumption patterns. Vice-president Ecoropa and Coordinator of Ecoropa's Biotechnology Programme. NGO-observer at the negotiations for the Biosafety Protocol since 1996. Member of the International Steering Committee of the women's network Diverse Women for Diversity, member of the Advisory Council of the German Consumer Testing Group, member of the Federation of German Scientists and their speaker on the precautionary principle, member of the general assembly of the Heinrich Böll Foundation, participant of the Regional Round Table for Europe and North America in Vail, in preparation for WSSD.

**Sviatoslav Zabelin, Russia**

Co-Chair of the Council of the International Socio-Ecological Union (SEU), Moscow (founded in 1987). Today, the SEU comprises near 250 member organisations within the CIS states and several western countries (USA, Norway, Finland, Spain, Scotland) focussing on social ecology, chemical and nuclear safety, renewable energy, biodiversity, sustainable forestry, air and water issues etc. Between 1991 and 1993 assistant for Alexei Yablokov, advisor to president Boris Yeltsin on Ecology and Health, author of several environmental laws. Goldman Environmental Prize 1993.

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Native of India. Worked with grassroots groups in their struggle for livelihood rights in Central India for three years. Graduation (Economics & Business Organisation), Master (Institutional & Evolutionary Economics) in Germany. Invited lecturer at the Catholic University in Budapest, Hungary in 1998-99. Currently research scientist at chair of Economics and Philosophy in University of Witten/Herdecke (Germany) focusing on Global governance mechanisms & environmental sustainability.



List of Acronyms

CBD	Convention on Biological Diversity
CEO	Chief Executive Officer
CERES	Coalition for Environmentally Responsible Economies
CGIAR	Consultative Group on International Agriculture Research
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora (UN)
COMECON	The Council for Mutual Economic Assistance
CSD	Commission on Sustainable Development (UN)
ECOSOC	Economic and Social Council (UN)
EUROSOLAR	European Association for Renewable Energies
FAO	Food and Agriculture Organization (UN)
FOEI	Friends of the Earth International
G7	Group of Seven Industrial Nations
GATT	General Agreement on Tariffs and Trade
GEF	Global Environment Facility (UN)
GNP	Gross National Product
GRI	Global Reporting Initiative
GTZ	German Society for Technical Cooperation
HIPC	Debt Relief for Sustainable Development – A World Bank Initiative for Heavily Indebted Poor Countries
IAEA	International Atomic Energy Agency
ILO	International Labor Organization
IMF	International Monetary Fund
IRENA	International Renewable Energy Agency
IUCN	The World Conservation Union
LETS	Local Exchange and Trading System
MEA	Multilateral Environmental Agreement
NEPAD	The New Partnership for Africa's Development
NGO	Non-Governmental Organization
OAU	Organization for African Unity
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
PCA	Permanent Court of Arbitration
POPs	Persistent Organic Pollutants
R&D	Research and Development
SDR	Special Drawing Rights (IMF)
TNC	Transnational Corporation
UN	The United Nations
UNCED	United Nations Conference on Environment and Development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WBGU	German Advisory Council on Global Change
WCD	World Commission on Dams
WHO	World Health Organization (UN)
WTO	World Trade Organization

World Summit Papers

The Heinrich Böll Foundation publishes the World Summit Papers in preparation for the World Summit on Sustainable Development. The series contains a diversity of background information, studies, essays, documentations etc. related to issues of the World Summit. It is published in various languages both in the Foundation's head office in Berlin and in several offices of the Foundation abroad. Our intention is to contribute to the preparations of the international community for this Summit.

The publications can be downloaded at www.worldsummit2002.org. Within Germany, they can be ordered free of charge from the Heinrich Böll Foundation in Berlin.

World Summit Paper No. 1

Towards the World Summit on Sustainable Development

A discussion paper by the South African NGO Caucus on the World Summit for Sustainable Development. Berlin, January 2001.

World Summit Paper No. 2

10 Years after Rio – Debating Development Perspectives

A concise outlook on sustainable development implementation by Karl H. Segschneider. Chiang-Mai, May 2001. Only available as Download.

World Summit Paper No. 3

Breaking the Impasse. Forging an EU Leadership Initiative on Climate Change

A policy paper by Hermann E. Ott and Sebastian Oberthür. Berlin, June 2001. Previously released in 1999.

World Summit Paper No. 4

Von Rio nach Johannesburg

Beiträge zur Globalisierung der Nachhaltigkeit. Von Jürgen Trittin, Uschi Eid, Sascha Müller-Kraenner und Nika Greger. Berlin, October 2001.

World Summit Paper No. 5

From Rio to Johannesburg

Contributions to the Globalization of Sustainability by Jürgen Trittin, Uschi Eid, Sascha Müller-Kraenner and Nika Greger. Berlin, October 2001.

World Summit Paper No. 6

Globalización y Sustentabilidad

Un ensayo de Wolfgang Sachs. El Salvador, August 2001. Only available as Download. Previously published in English ("Globalization and Sustainability", Documentations, Papers & Reports No.5).

World Summit Paper No. 7

Globalization and Poverty – an Ecological Perspective

By Roldan Muradian and Joan Martinez-Alier. Berlin, December 2001.

World Summit Paper No. 8

Rio+10 and the North-South Divide

An Essay by Wolfgang Sachs, Berlin, December 2001.

World Summit Paper No. 9

The Road to Johannesburg after September 11, 2001

Documentation of an Online-Debate held in November 2001 at www.worldsummit2002.org Berlin, March 2002

World Summit Paper No. 10

Gender Equity for Sustainable Development

A briefing paper by Minu Hemmati. Berlin, March 2002.

Heinrich Böll Foundation

The Heinrich Böll Foundation, affiliated with the Green Party and headquartered in the Hackesche Höfe in the heart of Berlin, is a legally independent political foundation working in the spirit of intellectual openness.

The Foundation's primary objective is to support political education both within Germany and abroad, thus promoting democratic involvement, sociopolitical activism, and cross-cultural understanding.

The Foundation also provides support for art and culture, science and research, and developmental cooperation. Its activities are guided by the fundamental political values of ecology, democracy, solidarity, and non-violence.

By way of its international collaboration with a large number of project partners – currently numbering about 200 projects in 60 countries – the Foundation aims to strengthen ecological and civil activism on a global level, to intensify the exchange of ideas and experiences, and to keep our sensibilities alert for change. The Heinrich Böll Foundation's collaboration on sociopolitical education programs with its project partners abroad is on a long-term basis. Additional important instruments of international cooperation include visitor programs, which enhance the exchange of experiences and of political networking, as well as basic and advanced training programs for committed activists.

The Heinrich Böll Foundation has about 160 full-time employees as well as approximately 300 supporting members who provide both financial and non-material assistance.

Ralf Fücks and Barbara Unmüßig comprise the current Executive Board.

Two additional bodies of the Foundation's educational work are: the "Green Academy" and the "Feminist Institute".

The Foundation currently maintains foreign and project offices in the USA and the Arab Middle East, in Bosnia-Herzegovina, Brazil, Cambodia, the Czech Republic, El Salvador, Israel, Kenya, Pakistan, South Africa, Thai-land, Turkey, and an EU office in Brussels.

For 2002, the Foundation has almost 35 million euro public funds at its disposal.



HEINRICH BÖLL FOUNDATION



From the Foreword

What will be the legacy of the Johannesburg World Summit on Sustainable Development? Will it be remembered as an "historic" watershed, as we now regard the 1992 Rio Earth Summit? Will Johannesburg generate results that will be worthy of celebration, or will it lead to yet another meaningless global photo opportunity?

We publish this Memorandum a few months before the Summit, at a critical juncture of renewed political momentum. It is our contribution to the debate on both the desired outcomes of the Summit and the critical path for the sustainable development agenda in the next decade.

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