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Embracing the Millennium

Embracing the Millennium: Perspectives and Challenges for the United Nations and the International Community

Edited by Hans van Ginkel and Ramesh Thakur



The United Nations
University

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Preface

Hans van Ginkel and Ramesh Thakur

The United Nations University (UNU) is an institution, headquartered in Japan but with a global reach and network, that is engaged with the world of problem-solving scholarship through the United Nations system and beyond. Its mission is to contribute, through research and capacity building, to efforts to resolve the pressing global problems that are of concern to the United Nations, its Peoples and Member States.

It is the forward-looking, problem-solving orientation of UNU which distinguishes its work from that of traditional universities. The UNU eschews basic research for its own sake, focusing instead on education and research that meet the needs of the United Nations, the international scientific community and the people of the world. In particular, the UNU tries to bring current scientific scholarship to bear on problems of international public policy. The UNU is all about “bridging the gap”: between theory and practice, between scholarship and diplomacy, between the United Nations and the world community of scholars, and between governments, NGOs and people.

The landmark Millennium Conference of January 2000 – where the papers in this volume were initially presented – was an important demonstration of how the UNU can implement its mandate with respect to its many constituencies. The conference comprised three integral and complementary elements that were organized to create new ideas and fresh thinking of relevance to the United Nations and, in a wider sense, to the challenges faced by humanity.

The first element was the plenary session at the opening. This session, which featured the keynote speech of Deputy Secretary-General Louise Fréchet, served as a high-profile “kick-off” event to lay out the challenges

and the agenda that confront the United Nations at the beginning of this new millennium.

The second element consisted of four parallel working groups, for Human Development, Security, Governance and the Environment. Participants in these working groups took stock of key international trends and considered their implications for human development, peace and security, governance, and the environment into the twenty-first century. The groups were a focused but interdisciplinary exercise aimed at producing substantive policy-oriented ideas. The themes and topics were selected in consultation with the Strategic Planning Unit of the Executive Office of the Secretary-General.

Most of the position papers were forwarded to New York in advance of the Tokyo conference to be fed into the preparations for the Secretary-General's Millennium Assembly report. The results of the working group discussions were also forwarded to the Executive Office of the Secretary-General. Revised versions of some of these papers have been published in other UNU volumes.

As part of the working group discussions, specific attention was given to the following central themes:

- the major trends and their policy implications/recommendations;
- the impact of globalization;
- the key challenges for the short and medium terms (through the year 2005);
- how national governments and the international community might more broadly address the challenges;
- the comparative advantage that the UN has, or might have, in working with (and in the name of) the international community to address the challenges;
- the potential for partnerships among states, international organizations, the private sector, and civil society actors in collectively addressing the challenges; and
- the element of "surprise" or unpredictability; whether it is possible to identify critical triggers of unforeseeable potential developments.

The third element of the Millennium Conference was the public plenary on the final day, 21 January. This public plenary concluded, synthesized and projected the key issues and challenges of the conference into the new millennium. During this plenary, a number of prominent authorities delivered keynote speeches that considered the key subjects of the conference with reference to the themes of "vision" (looking ahead to where, from their point of view, they would like the world to be at the turn of the *next* century) and "feasibility" (what practical steps will need to be taken over the next 100 years if the world is to achieve the envisioned state).

Universities are marketplaces of ideas. The United Nations University is in a unique position, lying as it does at the interactive interface between ideas, international organizations and international public policy. The United Nations has the responsibility to maintain international peace and security and to promote human development. Scientists and scholars have

a duty to make their knowledge available for the betterment of humanity. And the UNU has the mandate to link the two normally isolated worlds of scholarship and policy-making. This volume is an effort, however modest, to fulfil this mandate.

Introduction

Confronting the Millennium: The Future United Nations

Louise Fréchette
Deputy Secretary-General of the United Nations

The United Nations University, which is dedicated to the sharing of knowledge, is an excellent place from which to start a new chapter in human history. In a world where knowledge is as formidable an asset as technology or oil, that commitment is in the best tradition of global fraternity.

We are, however, engaged in a somewhat uncertain enterprise. The philosopher Karl Popper once said that “we cannot anticipate today what we shall know only tomorrow.” The course of 20th-century history is littered with discarded theses and discredited predictions. As we look ahead, we are not likely to know what advances or crises are going to light or blight our path. Surprise has always been the order of the day.

Still, however difficult or risky it might be to peer into the future, peer we must. Population growth, energy consumption, economic growth, health and education levels, technological breakthroughs – these are some of the trends we can extrapolate, and so at least imagine what the world may look like one or two decades hence. And while human beings are not known for long-term thinking or planning, we *must* project ourselves forward, lest we miss opportunities for progress, lest we fail to ward off impending calamities, or – just as bad – lest we gird ourselves for the wrong battles.

Two Trends

Two trends form the overall environment in which we work. The first – concern for the well-being of individual human beings – is certainly not new. Is it not what “liberté, égalité, fraternité,” or the “life, liberty and the pursuit of happiness” are about? But it has assumed true prominence only in

recent years. The second – globalization – is also familiar to us; human beings have interacted across the planet for centuries. But today's globalization is different – in its pace, its impact and especially in its driving mechanisms.

The two trends are closely related. Both create intense pressure on the nation-state – globalization from above, concern for individuals from below – and imply dramatic changes in our understanding of state and individual sovereignty. And each feeds, and is fed by, the other.

The information technologies that make up part of globalization's leading edge also help foster world-wide awareness of the fate and welfare of men, women and children. Indeed, the starving child whose image is beamed to comfortable living rooms from some faraway war-zone land, and the images of plenty and conspicuous consumption transmitted from a rich-country capital to the shanty-towns of the poor – both create two-way traffic in concern and wonder. The rights revolution, for its part, provides a spur to globalization. It is not only trade, finance and investment that are being globalized; so, too, are values such as equality, tolerance and freedom – which today, even more than in 1948, when the Universal Declaration of Human Rights was drafted, are recognized as truly universal.

Concern for the individual human being – for his or her dignity, liberties, rights and well-being – has a long if checkered history. But what is most striking about its development in the last half-century is not only the intensification of these concerns at the national level, but the prominence they have assumed in the international arena. That development has been marked by a series of milestones: the UN Charter, written in the name of “we, the peoples”; the Universal Declaration itself; and the plethora of more recent conventions, covenants and mechanisms that now encompass women's rights, minority rights, torture and more.

A solid framework of international law and practices has been put in place. Some say this is a mere “paper” triumph, and there admittedly does remain an alarming chasm between laws on the books and daily reality. Still, the United Nations has spawned increasingly intrusive mechanisms to monitor and foster respect for human rights – for example, the thematic and country-specific special rapporteurs. Of an even higher order – and this is truly one of the most dramatic developments in the last decade of the 20th century – has been the willingness of the international community to deploy troops and take other action aimed at preventing gross abuses of human rights. I am thinking, for example, of the International Criminal Tribunals created by the Security Council to investigate genocide and crimes against humanity committed in Rwanda and the former Yugoslavia.

The internationalization of concern for individual human beings seems to me to be irreversible. It is bringing profound changes to national life and international life. Citizens, conscious of their rights, want to be heard, want to participate – in short, to be in charge of their future. As Secretary-General Kofi Annan has said, it is now widely understood that states are the servants of, and accountable to, their peoples, not the other way around.

However, growing pains are evident in efforts to involve civil society more deeply in the work of governments and international organizations. The passion of civil society groups is clear. So, too, is their power; witness their role in successful campaigns to ban land-mines, promote debt relief and adopt the Rome Statute for the International Criminal Court, and in influencing the outcomes of the Earth Summit and other major world conferences over the past decade. But the actual mechanisms for their participation are showing strains, as governments question their legitimacy while they, in turn, question whether governments are really committed to anything more than token transparency.

Globalization is also irreversible. Globalization is commonly understood to describe those advances in technology and communications that have made possible an unprecedented degree of financial and economic interdependence and potential for growth. As markets are integrated, the theory goes, investments flow more easily, competition is enhanced, prices are lowered and living standards everywhere are improved. Today, globalization is a fact of life, although the theory has not worked out precisely as envisaged.

We are all consumers in the same global economy. Instant communications and free-wheeling movements of capital, goods and peoples have created a web of relationships that transcend frontiers. The process is bringing us more choices and new opportunities for prosperity. It is making us more familiar with global diversity. But it also brings uncertainties. There are losers as well as winners. It is exacerbating already large gaps between rich and poor, both within and among nations.

Millions of people around the world experience globalization not as an agent of progress, but as a disruptive – even destructive – force. Many more millions are completely excluded from its benefits. Half the world's people, for example, have never made or received a telephone call. To them, the great gains of science, medicine and technology might as well be taking place on another planet. Meanwhile, criminal groups take advantage of porous borders and powerful new technologies for their own nefarious aims.

Earlier this month, a single day's front page of the *New York Times* offered two examples of the fast-changing world in which we live and the wide-ranging new forces with which we must contend. One story told of a credit card cyberscam in which the criminal was sitting at a computer somewhere in Eastern Europe, but the threat was to wallets and pocket-books on the streets of the United States. A second story showed how people could circumvent public health laws by ordering medicines, some of them untested or of questionable value, through the Internet. Clearly, states are having difficulty in keeping pace with technical change and human ingenuity.

So, globalization confronts us with the challenge of reconciling the imperatives of global markets with the socio-economic needs of the world's people, of realizing its full potential while minimizing the threat of new divisions in our world, and of backlash and recourse to the damaging

“isms” of our post-cold-war world: populism, nationalism, ethnic chauvinism, fanaticism and terrorism.

Three Imperatives

This, then, is the backdrop for our work as we embark on a new millennium. Globalization and concern for individual well-being are the grand, defining forces of our day, affecting more and more aspects of our lives. And as they do so, they are showing us yet another key feature of our world: that almost every phenomenon or problem we face – from education to the environment; from disarmament to development to discrimination – has a compelling and often overwhelming international dimension. These are issues which transcend borders, and are beyond the power of any single nation to control or even confront. Thus, they require some form of management and cooperation at the global level. And that challenge suggests three broad imperatives.

First is the need for legitimacy. Our intergovernmental institutions often function in a way that is not fully in keeping with today’s demands and desires for openness. Whether we are speaking of the United Nations Security Council, the World Trade Organization, the Bretton Woods Institutions or forums such as the G-7/G-8, decision-making is often concentrated in the hands of only a small number of powerful nations. Indeed, sometimes the institutions are designed in just such a way as to keep key issues under tight control. This was one of the main criticisms of the goings-on in Seattle – and not without reason or resonance. In the future, things must be more transparent and participatory, not as a reward or privilege but as a basic right and smart way of doing business.

There is another side to the question of legitimacy. In addition to excluding other governments, governments also routinely fail to reach beyond the ranks of officialdom into those of civil society. The state-based order continues to prevail. Governments must do more to involve civil society groups and to make national and international decision-making more representative. Only then will those decisions be able to win popular support and adherence.

Second, we must also ask whether we have the instruments and institutions we need to make connections among a vast array of complex and closely related issues. At the moment, our system is fragmented; all too often, issues are addressed piecemeal rather than “in the round”; and in the worst case, institutions trespass on each other’s turf, causing substantive confusion, bureaucratic strife and political stalemate.

What went wrong in Seattle is an example. While much has been done over the last half-century to make the trading system a success, other urgent issues – such as protecting human rights, safeguarding the environment and ensuring labour standards – have not been addressed with a similar sense of purpose. Conventions and institutions exist with which we can deal directly

with these issues: the International Labour Organization, the UN Environment Programme and the UN High Commissioner for Human Rights. But they have been under-utilized, and instead we see NGOs seeking to advance these worthy causes by placing new shackles on world trade.

So my sense is that we *do* have the instruments and institutions we need, most notably the United Nations and its system of specialized agencies. But we need better coherence among them, and greater willingness to give them the resources and authority they need. This is the essence of the Secretary-General's reform programme.

A third and final imperative is our ultimate test: the test of effectiveness, for which legitimacy and institutions are the building blocks. Effectiveness has two aspects: the availability of tools, and the enforcement of what has been agreed. The international community has long experience with peace-keeping, refugee protection and other steps in the face of humanitarian emergencies. But in the wake of failures, and in light of newer and more complex challenges presented by internal conflicts, we have only begun the difficult task of elaborating and discussing principles for intervention. Likewise, in our efforts to defeat poverty and advance development, we face a gap between the lofty goals that states agree on in principle, and the meagre resources – including official development assistance – that they provide in practice. If creating the tools is a matter of collective, international action, enforcement is a question of national follow-up. Here, too, governments acting within their spheres are often tardy or reluctant to comply with the promises they have made.

Our constant search is for the right balance: between universal institutions and effective ones; between what sounds correct in theory and what makes a real, positive difference in peoples' lives. However difficult this process may be, there is no doubt that we can and must improve upon "business as usual." And in those many areas where there is a common interest, threat or vulnerability, the United Nations system can be a crucial part of the solutions we need – but only if its Member States endow it with the authority and resources (political, material, financial) that it needs to do the job.

The obstacle is not so much lack of knowledge about what to do, as a lack of political will to do what we know needs to be done. So let us continue taking the future's measure. Let us continue building the rules, tools and institutions by which an international community can manage life in the global era. Most of all, let us resolve to live in that community rather than visiting it from time to time when the mood or need suits.

Part I

Policy Perspectives

The following four chapters represent the summaries of the working groups on the United Nations University International Conference – On the Threshold: The United Nations and Global Governance in the New Millennium – held at the University’s headquarters in Tokyo, Japan, on 19–21 January 2000. Background explanation has been added and certain ideas elaborated in order to emphasize relevant points.

Human Development: Trends, Challenges and Priorities

Hans van Ginkel, Julius Court and Brendan Barrett

Introduction

Human development is about enhancing people's choices and raising their level of well-being. A particularly powerful, new way of approaching this issue has been presented in the recent work of Amartya Sen (1999). Sen emphasizes the intrinsic importance of human freedom as the pre-eminent objective of development. From this perspective, substantive freedom includes the basic ability to avoid deprivations such as starvation, under-nourishment or premature mortality. It also includes the acquisition of certain basic skills such as numeracy and literacy, as well as the ability to enjoy political participation. Development, therefore, can be understood as the process of expanding these freedoms to an ever-greater number of people.

This paper takes Sen's conceptualization of development as its starting point, since it relates closely to the question of how humanity ought best to respond to issues of global significance as expounded by the founders of the UN (as well as by classic economic and political thinkers from Adam Smith to Thomas Jefferson). For example, the Preamble to the UN Charter notes: "We the peoples of the United Nations determined . . . to promote social progress and better standards of life in larger freedom."¹ Similarly, the Universal Declaration of Human Rights states that "Member States have pledged themselves to achieve . . . the promotion of universal respect for and observance of human rights and fundamental freedoms."²

From the 1950s onwards, there has been rapid improvement across the globe with respect to human development. It is estimated that over the last

40 years, life expectancy has risen more than in the previous 4,000 years. Nevertheless, while widespread progress is achievable, it is not inevitable. For many people on the planet today, the UN goals of peace and prosperity are more elusive than ever. The most critical issue is that around 1.2 billion people live in severe poverty – i.e., on less than \$1 a day – and this number is increasing.

Reducing inequality and poverty represents a critical challenge for developing countries, international donors and the UN system. Unfortunately, commitment is lacking in many instances at both the national and international levels. Put simply, there is a gap between rhetoric and action. At the national level, many developing countries still spend more on the purchase of arms from the industrialized countries than they do on health and education combined. At the international level, development assistance levels are falling, and contributions are often provided in ways that have a sub-optimal impact.

“Accelerated globalization” (characterized amongst others by rapid movement of information, people, capital and finance) is becoming a critical factor shaping the contemporary forms of human development. It presents tantalizing prospects for shared global prosperity, but it could also lead to a widening of the economic and social gap between the rich and the poor within and between nations. Opportunity and risk, integration and polarization, exclusion and inclusion have never before been so closely intertwined. It is critically important to take a holistic view and address the economic, social, political and environmental hazards associated with the globalization phenomenon. The widespread concern is that globalization is out of control. In addition, many of the global institutions (including the UN and the Bretton Woods) seem unable to respond adequately. Recent events at the WTO Ministerial Meeting in Seattle indicate that unless national governments and the international community co-operate to address these issues, there is likely to be further destabilizing backlashes against globalization. This would be an undesirable turn of events since globalization brings benefits as well as costs; the objective should be to maximize the former while diminishing the latter.

This paper begins by exploring the evolving framework for human development and highlights some of the critical opportunities and threats. This is followed by a discussion of the priorities for policy makers in developing countries. To have the greatest impact on poverty in the twenty-first century, the paper argues that developing countries will need to focus on six fundamental pillars, as follows:

- human rights;
- good governance and political participation;
- faster economic growth;
- meeting basic needs and inequality reduction;
- integration with the global economy; and
- environmental security.

The paper examines broad ways by which the international community could support these efforts. It looks specifically at the potential partners and the comparative advantage of the UN. This is followed by the presentation of a set of recommendations for UN reforms in order to promote more effective responses to the human development challenge.

Contemporary Trends and Future Challenges

When assessing the current situation and looking to the future, it is important to highlight some of the key processes that are having and will have the greatest impact on human development. It is also necessary to recognize that these are all human-made policies/processes and, therefore, within our power to change.

- *Globalization*: Commonly defined as an economic process, globalization also has political, social, cultural and technological dimensions associated with increased international interactions and cross-border transactions. See Beck (2000), Rodrik (1997) and Sassen (1998) for more in-depth discussion of globalization.
- *Internationalization*: There has been an increase in international agreements and treaties as well as in the number and scope of multilateral organizations.
- *Liberalization*: Markets are spreading and economies are increasingly open. Twenty years ago, only 2.9 billion people lived in a market economy whereas 5.7 billion do today.
- *Democratization*: Democracies are spreading and polities are increasingly open. The proportion of democratic countries has more than doubled from 27 per cent in 1974 to 61 per cent of all countries in 1998. In addition, the role played by civil society (NGOs, the media and think tanks) in shaping national priorities is growing.
- *Localization*: The economic and political power of cities, provinces and other sub-national entities is increasing. A key aspect is urbanization, with the number of people living in cities growing rapidly so that urban areas will comprise two-thirds of the world population by 2025. Most of this growth will be in developing countries, including increasing numbers of the urban poor.
- *Rapid technological change*: The rapid development of information and communications technology (ICT) as well as biotechnology has incredible potential to transform the economy as well as society as a whole.
- *Demographic change*: Although population growth is slowing down, total world population is still likely to increase from near 6 billion today to 7.5 billion in 2025. Much of this increase will take place in the developing world, while demographics in the industrialized world will be dominated by the continued shift in balance of the population structure toward the elderly.

- *Increasing resource scarcity:* The rapidly deteriorating balance between population and available resources, especially water, is likely to negatively affect living standards in developing countries.

The implications of these processes have been, and will continue to be, dramatic. They will continue to have both positive and negative ramifications. For instance, living standards are improving in many parts of the world. In developing countries over the past 30 years, life expectancy increased from 46 to 62 years, infant mortality rates have been halved, and adult literacy rates have risen from 48 per cent to 70 per cent. However, many unresolved challenges from the past have evolved or been exacerbated, while many new challenges have emerged. Even more surprises are yet to come, and the global community needs to be prepared and capable of dealing with the associated risks and opportunities. Fifteen years ago, few commentators predicted the end of the cold war, the incredible power of the Internet or the rapid spread and devastating impact of HIV/AIDS in many countries. Likewise, in the future we can anticipate that many current assumptions will be turned upside down. The nation state, for example, is under increased pressure to cope with the implications of globalization and the increased power of the transnational corporations.

So what are the main threats facing humankind in the twenty-first century? We begin by acknowledging that poverty has to be the number one challenge. The number of people living in severe poverty is estimated to increase to 1.8 billion by 2025. However, there are many different dimensions to poverty. In the 1970s, most international agencies approached the issue of poverty in terms of basic needs provision. In contrast, the World Bank until recently viewed poverty very narrowly in terms of income (World Bank, 1990). In response, and partly inspired by the work of Amartya Sen, the UNDP has been championing a human development approach (UNDP, 1992). More recently still there has been much emphasis, at UNICEF and DfID in particular, on a human rights approach to development (DfID, 2000).

Looking more closely at the poverty issue, it is possible to highlight six sets of problems that are likely to be some of the most critical for people around the world and the UN over the next decade.

- *Abuse of human rights:* War is occurring more frequently within countries and, as a result, civilians are increasingly the victims, with many losing their homes, families and lives. Conflicts also impose very large costs on developing economies and nullify domestic and international efforts to reduce poverty. In addition, evidence indicates that extensive abuses of human rights regularly occur in countries around the world. For example, many countries regularly flout internationally agreed human rights, such as the rights of life and liberty; the right to freedom from discrimination, and the right of freedom of thought, expression, assembly and association.³ A recent Gallup global public opinion survey (the largest ever covering 60 countries) highlighted great public concern about the need to

protect human rights and the fact that governments are doing too little to address these problems (Sprogard and James, 2000).

- *Participation and good governance:* The importance of participation is increasingly highlighted as a critical element of development (Sen, 1999). Evidence from around the world in the Voices of the Poor study (Narayan et al., 2000) highlights the issues of powerlessness and voicelessness. This also reflects the Gallup survey findings regarding a general dissatisfaction around the world with the way that democracy works or does not work. Even when societies are considered to be democratic, there is a lack of efficacy in many instances that is shaped by the inefficient, unresponsive and unjust way in which governance takes place (Sprogard and James, 2000). Conversely, there is increasing empirical support regarding the importance of governance for development (Kaufmann et al., 1999). Secretary-General Kofi Annan (1998) has also noted that “good governance is perhaps the single most important factor in eradicating poverty and promoting development.”
- *Slow global growth and not enough economic growth in poor countries:* The global rate of economic growth has been slower in the current era of “accelerated globalization” than in the “golden age” of the 1960s. For Least Developed Countries (LDCs) to achieve and sustain the levels of growth required to make a substantial reduction in poverty, the global rate of growth will need to be improved. The global economic system also has been characterized by increasing instability and insecurity in recent years. Improving overall growth and reducing instability will particularly require reform in the rich countries as well as co-ordinated international action. However, there has been a massive divergence in development outcomes. While the lives of some 1.5 billion people have been greatly improved by the dramatic economic growth in 15 Asian countries, the quality of life for another 1.6 billion in 100 countries has steadily declined. In 70 of these countries, average incomes are lower today than in 1980. Poor countries will need to grow much faster, at around 6 per cent per capita annually, if they are to make significant inroads in reducing poverty.
- *Lack of basic needs and increasing inequality:* Although, as argued above, poverty has many dimensions, the clearest issue is that the poor constantly live with hunger. This has been highlighted in the seminal work of Sen (1989) as well as in the recent Voices of the Poor study (Narayan et al., 2000). Similarly, there is still massive need for investment in health and education. Progress in human development is being further inhibited by the lack of investment in public health and the emergence of new health problems – in particular, HIV/AIDS. To foster broad-based human development as well as to prepare for future globalization, many parts of the world will need to deal with the inadequacy of human capital formation. On top of all this, income inequality within countries is also increasing, and gender inequality remains too high in many countries. Seventy per cent of the world’s 1.3 billion poor are female!

- *Marginalization of the poorest countries:* There is increased marginalization of many developing countries, particularly the poorest. For example, in the mid-1950s Sub-Saharan Africa accounted for 3.1 per cent of global exports; by 1995, this share had fallen to 1.4 per cent. In addition, many countries in Africa attract virtually no inward investment – the region as a whole accounts for less than 1 per cent of world investment flows (Collier, 1995). There is also increasing concern with the widening technology gap. This refers to information and communications technology and the “digital divide” in particular, but biotechnology also has incredible potential to transform economy and society (Rifkin, 1999). To gain a better sharing of the benefits of globalization, there is an urgent need for more systemic integration of developing countries into the world economy and for concerted efforts to bridge the technology gap.
- *Environmental security:* There has been concern since the Rio Earth Summit over the unsustainable use and scarcity of natural resources. The Gallup survey highlighted environmental issues as an area where governments are doing too little to address the problems (Sprogard and James, 2000). However, the Gallup survey included few developing countries. Our assessment is that, with the exceptions of water and biodiversity, environmental issues in general are NOT the highest priority *for developing countries* over the next decade. Rather we envisage that developing countries must strike a delicate balance between tackling pressing problems such as poverty reduction (or human security) while at the same time not undermining ecological sustainability. Put very simply, in the industrialized world environmental issues are in the “driving seat” while in the developing world it is poverty. Nevertheless, the route to be navigated to a sustainable future is the same. This is based on the projections that population will stabilize around 2050 at lower than expected levels, and that technological advances mean that food and energy crises can be avoided. Water is the main threat in the developing world. It is estimated that 1.3 billion people do not have safe drinking water. Also, there is increasing realization of the value of global biodiversity resources and the need for more systematic conservation (Myers, 2000). It is estimated, for example, that forests are being destroyed at the rate of an acre a second. Much of this change is taking place in the developing world but we, the global community, need to act collectively if we are to reduce these rates of destruction.

What are the Priorities for LDC Policy Makers?

The livelihoods of people in the twenty-first century will be shaped by the development decisions made today. This century could become the era in which humankind attains unprecedented improvement in the quality of life for people everywhere. Primary responsibility and accountability for poverty reduction and human development rests with the nation state. Peoples

and governments must write their own destiny, and self-determination is key to effective human development. Success is within reach of national governments and their internal (and external) partners if they take effective actions to develop policies and institutions that promote growth while at the same time reducing inequality and poverty.

Here, we highlight some of the fundamental policies in the six critical areas mentioned above.

Respect for Human Rights⁴

The human rights approach to development is built on the foundations of the Universal Declaration of Human Rights (UDHR) and other UN agreements. The rights approach recognizes civil and political rights as well as economic, social and cultural rights.

That human rights are universal is contested ground. Consequently, it may be more appropriate to approach this from the perspective that there is consensus on some of the fundamental human rights that all people are entitled to. Advocates highlight that the 58 Member States of the United Nations General Assembly in 1948 adopted the UDHR. And more recently, at the World Conference on Human Rights held in Vienna in 1993, 171 countries reaffirmed their commitment to the UDHR. The pursuit of basic human rights is important from a development perspective since progress will not take place unless the poor people are engaged in the process. The inclusive approach is essentially about empowerment – enabling people to make their own decisions.

While every country in the world has ratified at least one of the six principal human rights treaties (DFID, 2000), these obligations are often not taken very seriously. There remain many areas where action is required from states to meet their human rights obligations. These will involve recognition of the following points:

- Increased citizen participation in decision-making processes is key to empowerment and is central to enabling people to claim all their human rights.
- An inclusive society is one in which people are able to claim their rights. The challenge is that there are specific groups in many societies that are discriminated against or excluded from the benefits of development.
- States have obligations to respect, protect, promote and fulfil human rights.

However, strategies to meet such challenges will vary from country to country. Measures over the long term are needed to ensure respect for a basic level of rights and to improve the situation incrementally. The level of economic development will obviously affect what is achievable. Experience shows that legal measures are not always effective. Standard setting and providing a clear outline of entitlements, however, does help even in the poorest countries. Encouraging civil society organizations is also an important aspect.

Good Governance

Although the concept is not new, governance is increasingly seen as a critical factor in explaining variations in development performance around the world. Governance (at the national level) refers to “the formation and stewardship of the rules that regulate the public realm: the arena in which state as well as economic and societal actors operate and interact to make authoritative decisions.”⁵ More specifically, it emphasizes that what matters is not only what is decided upon but also how policies are made. The institutional framework within which policies are made may or may not be conducive to publicly acceptable outcomes. Governance, therefore, is an activity that bears both on the effectiveness of public policy and the legitimacy of the system within which substantive policy decisions are made.

Hyden and Court (2001) outline six dimensions that are at the core of the governance debate:⁶

- *Participatory*: The way rules are constituted in order to channel participation in public affairs is generally considered an important aspect of governance. Both effective policy-making and procedural legitimacy are likely to be achieved when citizens and other institutions (commonly referred to as “civil society”) have a chance to influence how rules are formulated and implemented.
- *Intermediary*: This refers to the way that a polity organizes itself in order to exercise control over public policy. More specifically, it deals with “political society,” i.e., the rules applying to the formation of political parties, election of leaders and constitution of legislatures. These are the intermediaries between state and citizens and are crucial for the purpose of arriving at authoritative decisions. The issue of “contestability” is also vital to this realm – i.e., the notion that policies, leaders and institutions can and should be challenged by other sectors in society (Dahl, 1971).
- *Executive*: This refers to the operational realms of governance, and executive commitment to development versus personal aggrandisement or acceptance of systemic corruption. It also refers to performance in international relations (conflicts with neighbours versus more constructive contributions), a respect for human rights versus political terror and the issue of political-military relations.
- *Managerial*: This deals with how the policy implementation machinery is organized and the role of the bureaucracy that is the prime institutional focus of managerial dimensions.
- *Regulatory*: This arena, which may be called “economic society,” mediates between state and market by creating the conditions for growth and addressing market failures (Linz and Stepan, 1996). When firms have an opportunity to influence the way rules are formulated and implemented, there is likely to be an additional benefit of more effective policy-making and greater legitimacy.
- *Adjudicatory*: This covers the role that institutions created for dispute or conflict resolution play in governance. The significance of an independent judiciary is a case that is often made in governance discourse. The

adjudicatory function, however, goes beyond this and concerns the preparedness of a country to handle conflicts between groups in society or conflicts with other countries. The rule of law is important here since a strong legal culture is a cornerstone of good governance, but the significance of other effective informal mechanisms to mediate conflicts should not be overlooked.

Economic Growth

Though not sufficient, economic growth must be at the heart of any sustainable strategy to reduce poverty. Unfortunately, as outlined above, many developing countries have not been able to move their economies onto a rapid and stable growth track. A key objective for developing countries in the early decades of the twenty-first century will be to reverse the decline of the recent past and focus on regenerating and accelerating growth.

Providing a sound and stable macroeconomic environment is an old dilemma, but one which remains fundamentally important. The growth “tragedy” in many countries is partly attributable to governments’ failure to achieve a stable macro-economic condition through the control of inflation, budget deficits, exchange rates, external debts and real interest rates. Although many countries have made significant improvements in these areas, there is a need to consolidate and further improve macro-economic fundamentals.

In many countries, investment has clearly been constrained by the low domestic saving rates, which, in Africa in the 1990s, averaged about 16 per cent compared, for instance, to over 30 per cent in Asia excluding Japan (Rwegasira, 1999). Reforms aimed at building efficient financial institutions and instruments as well as the pursuit of policies conducive to maximizing the potential benefits from interest rates are essential. In addition to boosting savings, measures designed to encourage domestic and foreign investment are vital. These include macroeconomic and financial stability, as mentioned above, and a favourable institutional and regulatory framework. It is important to reduce the perceived risk of policy reversals by providing credible commitments while at the same time spurring growth performance through investments in human and physical capital.

The drive for economic growth and diversification for the poorest countries must inevitably start with agriculture. In some developing countries it can account for 70 per cent of total employment, 40 per cent of merchandise exports and one-third of GDP. Policies to promote stronger agricultural growth need to address the incentive system of pricing and taxation of agricultural products, as well as the seriously inadequate investment (public and private) in the sector and the inadequate marketing systems.

There is growing recognition that institutions (the formal and informal rules that govern the interaction between the private sector, the public sector and society) are critical for development. Recent empirical research has highlighted the detrimental effects of a dysfunctional institutional infrastructure (poor rule of law, lack of political credibility and corruption) on

investment and growth. It is clear that national economies are shaped by contemporary socio-political circumstances as well as by their historical development. Moreover, markets should be viewed as a social construction, interacting with non-economic institutions and driven by variable incentive structures. Conditions will vary around the world, and such specificities must be taken into account in formulating and implementing economic development strategies.

Basic Needs and Reducing Inequality

If we consider that human development and economic growth are mutually reinforcing, then it can be concluded that by enhancing the human capacities of a country it will be possible to support economic growth. While this simplistic assumption holds true in most cases, and despite the obvious impact that greater investment in human capital has had in many parts of the world, the pace of progress with respect to human development has been worryingly slow. If we consider the minimum needs of people three issues come to the fore: food security, education and health.

- Hunger (or to use the more politically correct term, “food security”) lies at the heart of poverty (Sen 1989). The problem of hunger shames the global community since it is one of distribution rather than overall quantity. Already now, the available food resources would be enough to adequately feed the world’s population, while the expected increases in yields (even excluding genetic modifications) should be able to accommodate population increases. The problem is that the increase in food production will take place mainly in the temperate zones (North America, western Europe, Oceania and Argentina), while food deficits in several developing and transitional countries are likely to worsen. This highlights the need to develop tropical agricultural productivity, or growing food transfers via commercial and aid channels will be required.
- Education (or “human capital formation,” as it often referred to) is essential in order to ensure that citizens of the world can deal with the pressing global problems we now face. As part of the process of human development, countries need to accelerate expansion of equitable, broad-based and quality basic education, especially for girls. There are nearly one billion illiterate people, two-thirds of whom are women. Yet, the cost of attaining universal primary education in the next ten years (\$7–8 billion) is less than the amount Europeans spend on mineral water in one year or, more tragically perhaps, equivalent to 1 per cent of the annual income of the top three richest persons in the world. Here we see another balance to be struck in the developing world between providing basic education and the need to acquire advanced skills to ensure competitiveness and flexibility in dealing with the complexities of globalization, such as the growing digital divide.
- Similarly there is still massive need for investment in basic health. According to WHO, African countries spent on average 3.2 per cent of their GDP on health in 1995, which compares with 7.1 per cent in Europe and

14 per cent in the United States of America. Moreover, progress in extending health service provision has been seriously hindered in many countries through the emergence of new health problems – in particular, HIV/AIDS, which is now the number one overall cause of death in Africa, and has moved up to fourth place among all causes of death worldwide. In nine Southern African countries, HIV/AIDS will erase 17 years of potential gains in life expectancy (Kagia, 2000).

Turning our attention to the matter of inequality within countries, two main points can be made. First, income inequality within nations is increasing. Recent UNU/WIDER work indicates inequality is rising in 45 out of 77 countries studied (i.e., in 58 per cent of the cases) but these countries accounted for 79 per cent of world population (Cornia, 2000). Combating poverty will thus require a two-pronged strategy to reduce income inequality, as follows:

- Measures to reduce structural inequality are essential. Major land reform programmes (as in South Korea and Taiwan Province of China) have shown that it is possible to sharply curtail inequality and trigger rapid growth. While such reforms may require major political upheavals, inequality can also be reduced by improving access to a common-pool land, more equitable agrarian contracts, and through reform of the land market. In addition, as mentioned previously, in low-income societies, promoting growth in agriculture and labour-intensive industry – i.e., sectors with a high labour absorption – is also a key priority. Higher public expenditure on health, education, basic infrastructure and income transfers, as well as better access to financial markets, would also help, especially over the medium term.
- Making the “Washington Consensus” more distributionally favourable is another essential requirement in the effort to contain the rise in inequality. This would involve the avoidance of severe adjustment policies that have major impacts on the poor. It would also necessitate the inclusion of strong redistributive concerns in the design and regulation of privatization and domestic financial liberalization, as well as the implementation of policies to control wage inequality.

Second, although the situation is improving, gender inequality remains too high in many countries. Seventy per cent of the world’s 1.3 billion poor are female. It is estimated that violence against females between 15 and 44 years of age causes more deaths and disabilities than cancer, malaria, traffic accidents, and even war. Greater gender equality is an important goal in itself as well as a key contributor to broader development. Improving the status of women could be the most cost-effective strategy for addressing most of the challenges we face at this new millennium.

Strategic Integration with the Global Economy

If economies are to grow rapidly and societies are to reduce poverty, they will need to strengthen their participation in the global economy in ways that bring widespread and sustainable benefits for their peoples. Economic

liberalization is not enough – successful participation requires a strategic approach that is actively pursued. This should cover the pace, sequencing and timing of reform in different areas as well as social and economic policies.

In addition to the issues of macroeconomic stability and institutional factors (discussed previously in the economic growth section), some of the key policy issues are listed below:⁷

- *Liberalize trade, but with care:* In order to participate more in international trade, developing countries will need to further liberalize their trade regimes. However, in designing credible and sustainable trade reforms, more care will need to be taken regarding the sequencing, pace and phasing of trade liberalization. Countries should start with export liberalization and promotion, while import liberalization should be implemented steadily over a longer period.
- *Realize the opportunities for regional dynamism:* The first step towards participating more actively in global markets is to work towards trade liberalization and deregulation of foreign investment between neighbouring countries in order to generate regional dynamics. Building regional infrastructure networks in roads and telecommunications would also help.
- *Focus on the primary sector:* A crucial task for most developing countries is to rebuild the primary commodity export sector while also proceeding with strategies to promote export diversification. A vital consideration is that the primary sector should not be penalized.
- *Protection policies:* Some protection and selective promotion policies may be helpful, but they can be dangerous if the institutional preconditions are weak. Governments could also intervene to promote upgrading of exports and encourage inward investment. Selective promotion measures for consideration include export-processing zones (EPZs), bonded warehouses, duty exemption and drawback schemes. Also, protection can be justified in order to promote infant industries. However, in addition to the importance of sound policy foundations, selective measures can only be effective if the necessary institutional foundations exist.
- *Leverage the power of modern research and information technology:* Gaining access to the latest information technology and research provides possibilities for quantum leaps in human development. Information technologies, when well harnessed, can enable countries to “leapfrog,” share experiences and promote cross-fertilization of ideas. Sharing information on much more basic technologies, however, can have an enormous impact on development. For example, the majority of communicable diseases can be prevented with existing cost-effective strategies: bednets can prevent 50 per cent of all malaria deaths while strategies such as condom promotion, sex education and treatment of sexually transmitted diseases have been proved to reduce the spread of HIV/AIDS.

Environmental Security: Water and Biodiversity

Ensuring clean water for the poor is already a great challenge for developing countries, and the need will only increase. Ironically, most available

freshwater is found in developed nations, which have one-fifth of the world's population. Nearly all of the 3 billion increase in global population expected by 2025 will be in developing countries, where water is often already scarce, or comes in monsoons, hurricanes and floods, draining off the land quickly.

Water can be provided in rural and low-income urban areas through the utilization of low-cost technologies that include hand-pumps, gravity-feed systems and rainwater collection, which could be built to serve entire rural villages or urban neighbourhoods, rather than bringing indoor plumbing to individual houses. The provisions would include pumps, pipes, the training of workers, and the development and strengthening of water management practices.

Increasingly, however, problems are also appearing in the field of bio-diversity. Half-a-million species are already extinct, and another five million are at risk unless countervailing measures are introduced to avoid this global "tragedy of the commons." On the positive side, there is a growing awareness of the need to preserve bio-diversity – and of its economic value. Initial – and, by necessity, highly speculative – calculations suggest that, at US\$33 trillion, the potential Global Environmental Product exceeds the world GDP of US\$29 trillion (Myers, 2000).

From the above, it is clear that there is a great deal that individual nation states can do in order to enhance their human development potential. The general lack of commitment to tackle these problems is a cause for concern. For example, only 10 countries in Africa are on track to achieve the goals they set following the World Conference on Education for All in 1990. Many developing countries still spend more on arms than on health and education combined. More significant, perhaps, is the fact that global expenditure on arms exceeded US\$700 billion in 1998 (SIPRI, 1999).

What Are the International Dimensions?

Focusing our attention next on the role of the international community in tackling the issue of human development, it is possible to argue that there already exists a comprehensive and appropriate institutional architecture that, if better directed, could help accelerate domestic efforts to reduce poverty. The key task is to create enabling conditions for all economies to benefit from globalization. Another important way is to promote the sharing of international experiences on what works and what does not work.

Issues where more emphasis is needed include:

- *Ungoverned globalization*: While some problems can be solved at the domestic level, for others integrated solutions at a higher level will need to be found. It is worrying that "private economic actors" or, more specifically, transnational corporations are essentially driving the globalization process. This potentially creates a bias against collective institutions and public action at the international level. As a result, there is an increasing gap between global challenges and the capacity of "global institutions" to

deal with them. As Ted Turner eloquently stated, “It is as if globalization is in fast forward, and the world’s ability to understand and react to it is in slow motion.” More than ever there is a need for a stronger, accountable and participatory global governance system – one that balances private gains with the maintenance of world peace, human development and the sustainable management of the world’s resources. One that provides “*global public goods*,” such as financial stability and environmental security, and fights “*global public bads*,” such as organized crime, terrorism and illegal trade.

- *Guaranteeing open markets*: One effective mechanism to better integrate developing countries into the global economy would be for OECD countries to guarantee open markets for their exports and commit themselves to help reintegrate developing countries, especially the least developed, into the world economy. This is particularly important for key sectors such as the agriculture and labour-intensive manufacturing sectors. As James Wolfensohn, president of the World Bank, noted in Seattle: “It makes no sense to exhort poor countries to compete and pay their way in the world, while we deny them the means to do so by restricting their market access in areas such as agriculture.”
- *Radically transforming aid*: Overall aid has not worked very well in promoting development and will have to be substantially transformed if it is to serve as a useful instrument to promote broader human development goals. We want to highlight six issues. First, targeting projects has not worked due to “fungibility,” and funding should be shifted towards programmes identified by recipient governments. Second, aid has been highly effective in poor countries with sound human development policies and institutional frameworks. Aid, therefore, should predominantly be provided to such countries. Third, in countries without such policy and institutional infrastructures in place, the priority should be towards transferring knowledge on institution building as well as in providing aid for basic health and education so that countries are ready to respond once the incentive structures do shift. Fourth, aid is extraordinarily fragmented in many countries. This fragmentation needs to be countered by clear national strategies and effectively co-ordinated by recipient governments. Fifth, the delivery of bilateral foreign aid has been dictated more by the donor’s strategic/political interests than by the needs of the recipient countries, with negative outcomes in many cases. There may well be a case for multilateral organizations to take the lead in directing aid resources to countries where it would have the greatest impact on development outcomes. However, the track record of multilateral organizations in this area is far from perfect. The problems vary according to the organization. For instance, there is a perceived lack of accountability with regard to the actions of the IMF and WTO. The UN, on the other hand, is seen as overly bureaucratic and inflexible. Sixth, the positive impacts of aid are constrained by procurement restrictions and conditions unrelated to development – these need to be substantially reduced in the future.

- *Reducing the debt burden:* There is widespread recognition that high levels of debt act as a serious brake to sustainable development and that significant reductions for debt-burdened countries would improve growth prospects, particularly if the resources provided are additional. A dollar of reduced debt is therefore likely to be more valuable than an additional dollar of conventional aid. The Heavily Indebted Poor Countries (HIPC) initiative arose out of this understanding and was expanded as a follow up to the Cologne Summit in June 1999 to provide more debt relief to more countries faster, and redesigned to link debt relief to poverty reduction. Acceleration of the implementation of this programme is essential.

Effective Partnerships and the Comparative Advantage of the UN

Partnership is a buzzword of the later twentieth century. It is frequently argued that building more effective partnerships could have positive impact on human development. A useful approach to this issue was presented in the Comprehensive Development Framework proposed by World Bank President James Wolfensohn. In order to promote development, he argues for partnership between four main groups of actors:

- *Government:* Government includes not only national authorities, but provincial and state, city and municipal governments to the extent that they are relevant.
- *Civil society:* In all its diverse forms, civil society is probably one of the most influential factors shaping the development process in terms of human resources, experience and historical perspectives.
- *Private sector:* It is absolutely clear that domestic and foreign private investments are the key to economic growth and development as well as a prerequisite for the creation of employment opportunities.
- *Multilateral and bilateral organizations:* There are a great number of international programmes (including the UN system, regional groups, bilateral agencies, etc.) promoting peace and development.

What are the special attributes and comparative advantage of the UN? In many areas the activities of the UN hold great promise in averting conflict, in responding to humanitarian crises, in promoting development and in building consensus around key global issues. Multilateralism, however, is under threat, and regionalism appears to be gaining increased support. The high hopes of a greater role for the UN and multilateralism after the end of the cold war have yet to materialize. Nevertheless, the role of the UN is important in the following respects:

- *Global community:* The UN is the only universal body in the world in a real sense. The UN is unique as the world's sole organ in which all countries have the opportunity to lend their voice to ongoing discussions concerning our common human endeavours.
- *Legitimacy:* For many, despite its many faults, the UN has a legitimacy

and is not seen as ideologically tainted nor representative of certain economic or political groups.

- *Global goals:* The UN can have an impact by monitoring, interpreting and positively harnessing the current private sector dominated globalization and giving a strong message to the international community about the importance of human development and social as well as economic policies. While acting as the global voice, the UN has to avoid presenting itself as the moral conscience of the world.
- *Forum for international discussions and global standards:* The UN system has a definite comparative advantage in streamlining, organizing and supervising international governmental discussions and standard setting for economic, social and other policies (including consumer protection standards, environmental standards and so on). Firstly, no government can do that on its own and, secondly, there is a very real need to create synergies between the economic, social and the political elements of the international negotiations which the UN may be well placed to promote. In addition, the UN could play a role in monitoring the activities of transnational corporations. The objective, however, would not be to alienate such corporations but to constructively incorporate them within the human development debate. The latter objective could be more effectively attained through cooperation with the media at all levels. It is also important to acknowledge that increased attention needs to be focused on the activities of the global financial markets and investment programmes; some commentators are calling for the establishment of a World Financial Authority.
- *Solving global problems:* In an era of globalization, with the increase in global problems requiring cooperative international solutions, the need for the UN would seem to be greater than ever. The UN has an advantage in focusing on global problems and issues of concern to many countries. This is likely to increase in the future as globalization brings new types of global problems to the fore.

Priorities for UN Reform and Specific Suggestions

If the UN is to enhance its contribution in the area of poverty reduction, there are areas where major reform might be required over the medium to long term. Among others, these include:

- *Shift from the Security Council to an Executive Board:* It would probably be more effective (and more legitimate) to shift from the Security Council with 5 permanent members with veto powers to an Executive Board more like the World Bank and IMF. This would better reflect the current world situation, have an in-built mechanism for dealing with shifts in power over the long-term and would be much more effective in decision-making. The role of such a board could also be expanded to include priority economic and social issues.

- *Greater coherence on the issue of poverty:* As indicated above, there is a need for many countries and the UN system to focus strongly on eradicating poverty. This could also provide a theme around which to make the work of the UN more coherent. UN work on poverty essentially remains fragmented.
- *Improved functioning:* The UN needs to improve its functioning with respect to (i) systemic and cohesive coverage of issues, while at the same time avoiding the current overlap and duplications, (ii) mobilization of support around issue-specific problems – the UN functions best when galvanized around an issue – and (iii) cutting back on bureaucracy and enhance effectiveness – especially regarding personnel policy.
- *Enhance public accountability and legitimacy:* The UN seems too dominated by Member States not necessarily acting in the interest of the global community. In terms of legitimacy, it must try to move much closer to the “people” as implied in the UN Charter.
- *Emphasize the importance of knowledge:* The UN should put more emphasis on the generation and sharing of knowledge and good ideas to reduce poverty and increase equality.

Some more specific suggestions for the near future could be to:

- *Convene a major UN conference on globalization:* There remains a lack of understanding about many of the economic social, political and environmental implications of globalization and the most appropriate ways to reap the benefits and negotiate the challenges. The UN is well placed to convene such a meeting to address the issue in a holistic manner: an objective forum to bring together international agencies, national governments, private sector actors and NGOs. It also has the expertise in the different areas that would need to be addressed in such a meeting. Within this context, the UNU should play an important role in constructing a better conceptual apparatus for understanding globalization and challenging many of the existing assumptions that underpin this process.
- *Establish an international “technology bank”:* There is an ever-widening technology gap between the rich and poor countries. Scientific advance is progressing much faster than people realize. However, utilization of advances occurs much more slowly than people expect. The opportunity exists for the UN to act as a catalyst in this area – bridging the gap between technology advance and technology utilization for reducing poverty. The UN is the appropriate organization to establish an international “technology bank” that could acquire information on as well as rights to valuable technologies and make them available to less developed countries. It could also support and reward local innovation while at the same time building capacity for developing local strategies. Perhaps this could all be achieved through a Global Science and Technology Facility (similar to the Global Environment Facility).
- *Establish a technological forecasting and assessment agency:* New technologies have the potential to help solve pressing global problems. They may also have hidden dangers and consequences. Despite this, the current

approach to technological development throughout the world is much more reactive than proactive. It may therefore be very appropriate to consider setting up a UN agency that could act as a clearing house for technological forecasting and assessment – one that looks to the future and assesses the potential and dangers of different technologies that are emerging.

Conclusion

There are few simple solutions, and perhaps this paper seems too optimistic in presenting what appear to be easy answers to complex problems. However, it is clear that action is imperative and that one way forward would be to promote an approach based on the principle of subsidiarity with collaboration and partnerships between levels of government (international, national, local), civil society, the private sector and international institutions. An emphasis on self-determination could be balanced with collective international action where helpful. The existing international institutional architecture, though far from perfect, can be reoriented to more effectively moderate the existing tendencies that allow poverty and inequality to increase. This institutional framework needs to monitor and interpret the globalization process, prioritize and focus on the weakest regions, reward governments for strong performance, celebrate success rather than punish bad performance and, finally, focus on results.

Notes

1. See <http://www.un.org/aboutun/charter/>
2. See <http://www.un.org/Overview/rights.html>
3. For information on the 56th Session of the Commission on Human Rights please refer to the UNHCHR homepage at <http://www.unhchr.ch/html/menu2/2/56chr/56main.htm>
4. This section draws heavily on *Human Rights for Poor People* (DfID, 2000).
5. This is the definition used in Hyden and Court (2000).
6. These six dimensions are outlined in detail in Hyden and Court (2000).
7. For further detail please see: Aryeetey et al., 1998.

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Security

Shona Dodds and Albrecht Schnabel

Introduction

This chapter focuses upon six interrelated themes: multilateralism, intervention, defence, alliances, weapons of mass destruction, and “new” or “non-traditional” security. Particular emphasis is placed on the role that could be played by the United Nations and the potential for partnerships between this organization and other actors. Comments and recommendations were, generally, addressed to three audiences: national and international policy makers, the community, and academia.

The Changing Security Environment

While it would be an oversimplification to suggest that the results of the discussion could be summarized within one concise recommendation, it could be argued that the discussion succeeded in highlighting one clear future trend. The nature of the security environment has changed fundamentally since the end of the cold war and this has resulted in a rapid and dramatic expansion in both the range and level of demands placed upon the UN organization as a whole. This is particularly the case in regard to the organization’s role in the maintenance of international peace and security. While these changes present new and increasingly complex challenges to the UN, they also provide it with new opportunities to share more evenly the burdens associated with maintaining international peace and security.

The end of the cold war, coupled with the growing implications of globalization, provide an opportunity for the UN to enter into a new era of co-

operation with a wide range of regional organizations, coalitions of states, non-governmental organizations (NGOs) and civil society that share some of its goals. The challenge for the UN and its supporters is to locate ways in which these opportunities may be maximized without undermining the organization's well-earned legitimacy and primacy in regard to the maintenance of international peace and security.

In many ways, the security outlook as we enter the next millennium is more positive than it may first appear. Since the end of the cold war, the number of democracies in the world has increased – almost 100 per cent by some estimates. Market economies have spread extensively, and there has been an increase in economic interdependence. This spread has coincided with and may have contributed to the general reduction in violent conflict in the last decade. It is also significant that the levels of nuclear weapons have been reduced, as have defence budgets, arms transfers and refugee numbers. In addition, an expansion has occurred in regard to several security and arms control regimes, such as the Chemical Weapons Convention.

In other ways, however, the security outlook can be considered less positive. Some analysts also argue that the norm limiting the use of force to self-defence, or with the approval of the UN Security Council, has been weakened since the end of the cold war.¹ Also, the nature of warfare has dramatically changed. Most wars fought today are internal ones in which civilian populations are often considered as strategic targets. Combatants are often ignorant of the international laws relating to the treatment of civilians in war or, particularly in the case of non-state combatants, display a blatant disregard for them. Further, while general levels of arms transfers have decreased, the number of small arms transfers has increased. It is small arms that are responsible for the majority of military and civilian casualties in armed conflicts, yet they remain outside the umbrella of any international regulatory or control regime. An additional cause for concern is the lack of progress in nuclear disarmament negotiations and the potentially destabilizing impact of the proposed US Ballistic Missile Shield.

The challenges these changes present for the UN organization are profound. Not only is the organization being asked to do so much more, with limited financial and institutional resources, it is also being asked to play a yet-to-be-defined role in a yet-to-be-understood international environment. In the post-cold war world, the UN – and the Security Council, specifically – finds itself on new ground. The end of bipolar rivalries that defined the cold war era has not only changed the security landscape forever, it has removed many of the constraints that previously defined the role played by the Security Council. Since the inception of the organization in 1945, the Security Council has retained primary responsibility for the maintenance of international peace and security. During the Cold War the discharge of this responsibility was constrained by the veto powers of the five permanent Security Council members, including the Soviet Union and the United States. The end of the cold war increased the potential for Council action by reducing the threat of the use of the veto and also led to an expansion and

reformulation of what constitutes “the maintenance of international peace and security.”

In the post-cold war era, the range of issues to which the Security Council has been asked to turn its attention has stretched beyond traditional notions of state sovereignty and expanded to include humanitarian and human rights issues at both the national and international levels. It is this factor, coupled with increasing pressures relating to globalization, which renders the reform of UN security function a key priority. It is not only the case that the Security Council is being asked to stretch the organization’s limited resources even further in order to conduct a greater variety and number of activities, but it is also being required to interact with a greater number of regional coalitions and other non-governmental actors in the process. As the Security Council expands the range of its activities beyond traditional peacekeeping and peace enforcement operations, it is beginning to move into operational territory that overlaps with that of other institutions and actors, such as humanitarian organizations, development NGOs and regional security organizations. It is imperative, then, that the UN not only coordinate its activities with these other bodies but also maximize the efficiency and effectiveness of any such cooperation. This is more so the case if the UN is to become more effective in terms of conflict prevention and long-term post-conflict reconstruction.

The discussion and recommendations summarized in this chapter outline a variety of core priorities for the UN and explore ways in which different actors at both the national and international level may assist in their realization. Specific attention is paid to the potential contribution of the policy makers, the general public and the academic community. The recommendations put forward represent the input of participants in the United Nations University International Conference *On the Threshold*.

Multilateralism

Through its decisions over the last ten years the Security Council has, for good or ill, eroded the foundations of absolute conceptions of state sovereignty and fundamentally altered the way in which many of us perceive the relationship between state and citizens all over the world. Throughout the last decade, serious tensions have resurfaced in regard to issues relating to state sovereignty, legitimation of the use of force and the growing incidence of unilateralism by some major UN Member States. At the same time, the Security Council has redefined and, in a sense, expanded conceptions of what exactly constitutes a threat to international peace and security. The Council has also stimulated several radical legal developments at the international level, notably, the creation of International Criminal Tribunals for the Former Yugoslavia in 1993 and Rwanda in 1994. This, in turn, greatly intensified pressure for a more universal International Criminal Court, a statute regarding which was adopted at a diplomatic conference in Rome in 1998.

Throughout the 1990s, the level of resort to Chapter VII of the UN Charter has increased dramatically. This increase has brought one of the organization's most fundamental weaknesses to the fore: that is, its lack of independent capacity to conduct enforcement operations. This has led the Security Council to become increasingly reliant on "coalitions of the willing" to conduct such operations. A key priority for the UN, then, is how to provide effective control and oversight of operations conducted, under its auspices, by coalitions of willing states and also regional security organizations such as the North Atlantic Treaty Organization (NATO).

Perhaps a more pressing priority for the organization is the need to counter the recent trend towards unilateralism. To this end, the Security Council must focus on improving its working relationship with both the US and the Russian Federation. Both states, for differing reasons, are crucial to the effective operation of the Security Council and its ability to maintain international peace and security. In particular, the Security Council would benefit from a more sympathetic leadership in Washington. The Council should make greater efforts to ensure that the Russian Federation does not develop a sense of marginalization from its political processes. In order to preserve its legitimacy and authority, it is even more crucial that the Council develop an institutional framework for the conduct of humanitarian interventions. Similarly, the need to resolve questions relating to the retroactive legitimization of the use of force, as was at issue in the NATO-led Kosovo intervention, is becoming ever more urgent.

Another growing trend that became evident throughout the last decade is the erosion of the boundaries between traditional UN peacekeeping and peace enforcement operations. The early assumption that this erosion resulted from "mission creep" has been replaced by the realization that a completely new form of UN peace operations, humanitarian interventions, has evolved. These complex forms of intervention are on the rise and appear, very much, to have become a permanent feature on the international political landscape. Recent experiences have demonstrated that the UN has a number of strengths in this area, including the successful monitoring and support of large-scale refugee movements, as well as a number of weaknesses. Many of these weaknesses relate back to the lack of independent enforcement capacity, while others are related more closely to the sheer scale and number of tasks involved.

In addition, humanitarian interventions are a relatively new phenomenon, and their complexities are yet to be understood adequately at either a practical or conceptual level. At present, there appear to be a number of contradictions between the political, military and humanitarian aspects of these operations. A useful service could be provided by the academic community in terms of exploring the complexities and contradictions involved in humanitarian interventions, and academia could contribute greatly to the establishment of positive guidelines for future operations.

The academic community is well placed to make a significant contribution, in general, to the UN's efforts to adjust to its role in the post-cold war world. If, for example, the Security Council is to expand its definition of in-

ternational peace and security to include human rights and humanitarian issues, it will need to work more closely with other actors. The academic community could not only contribute to a better understanding of this expanded definition of peace and security, it also could help explore ways in which the UN may best achieve its expanded goals in collaboration with these other actors. Effective institutional mechanisms must be created if the UN is to maximize the potential benefits of such cooperation without losing overall operational control. Similarly, much research is needed with regard to how the Security Council can best manage increasingly complex operational mandates with a substantial civilian component.

Another challenge that may be addressed with the assistance of the academic community relates to the identification of more effective ways to induce compliance with Security Council resolutions. One method that has become more prominent over the last decade is the use of economic sanctions and embargoes. Such methods are increasingly proving to be not only slow and ineffective in many cases, but also damaging to civilian populations. Blanket sanctions, such as those imposed on Iraq in an effort to gain compliance with UN Security Council resolution 686 (2 March 1991), have been criticized strongly for failing to achieve their objective and for having a more devastating impact on the civilian population than the political regime at which they are directed. A framework needs to be located for more effectively targeting "smart" economic sanctions so that they may induce compliance without causing undue harm to civilian populations.

A general challenge that may be thrown down in front of policy makers, the public and the academic community alike is to ensure that UN peace and security efforts are more comprehensive. This requires a long-term approach to maintaining international peace and security that precedes and follows violent conflict and the threat thereof. One of the most significant failures of the Security Council thus far has been its inability to engage in meaningful and timely conflict prevention. Many of the reasons for this are political in nature, yet it remains true that the Security Council has often failed to take comprehensive preventive action when warning signs have indicated that an ongoing conflict is about to break out into violence. Rwanda is not the only case in point here, although it may be the most tragic. Similarly, while the UN has experienced a number of recent successes in terms of the implementation of comprehensive peace settlements that have prevented a return to violence, the organization could be made much more effective in its role within the process of democratization. UN efforts in this area, thus far, have tended to focus on the election itself and not paid adequate attention to preparation and medium term follow up. Again, the organization's limited resources, both human and financial, mean that a significant role could be played within this process by other legitimate international bodies.

Many of the challenges that lie ahead for the UN organization, its member states, and academia relate to the need to locate a firmer conceptual footing for the organization and its role in the post-cold war world. The

impact of the forces of globalization are reverberating around the globe, yet we have so far failed to resolve the most fundamental questions about how this affects the concept of national sovereignty. We know that the UN plays a substantial role in the creation and promulgation of international norms, yet we know little about how this process takes place. Even if we understood the UN's role in this regard, how do we reconcile these norms with contradictory tendencies at the national level, such as the practice of granting amnesties to individuals who have flouted international humanitarian law and offended the very principles to which the UN subscribes?

Other crucial challenges faced by the organization are much more practical in nature. Inadequate funding, for example, has always been and will remain a key threat to the UN's ability to fulfil its security function. The question of Security Council reform is also a recurring problem that must be resolved if the organization's legitimacy is to be retained and its relationship with several key member states protected. The relationship between the UN organization and the International Court of Justice (ICJ) should also be explored. This is particularly the case given the recent increase in calls for some form of independent judicial oversight of Security Council decisions. It has also been suggested that a framework be established through which the UN Secretary General may access advisory opinions from the ICJ in regard to peace and security issues.

All these challenges represent an opportunity for the UN to move a step closer to fulfilling the objectives for which it was created over fifty years ago. Many of the challenges outlined above were discussed in more depth within the context of specific security issues that have come to prominence as we enter the new millennium. These discussions are summarized in the following sections.

Intervention

Intervention is defined as a coercive action intended to change the behaviour of a party in a specific country. This may involve the threat or use of economic sanctions and/or force. At present, the US provides the bulk of the military might needed for large scale UN authorized interventions. It is also the US that is the most likely to conduct unilateral interventions in the future.

In the 1990s the Security Council has increasingly intervened to stop internal communal violence. The Council has considered that the gross violation of human rights represents a threat to international peace and security and, in several cases, has authorized the use of force to put a halt to such violence. In other cases, the Security Council has failed to equate gross human rights abuses with threats to international peace and security and has failed to authorize the use of force to ensure their halt. It is this failure to act, along with the unauthorized intervention by the US and its NATO allies in Kosovo and the former Yugoslavia in March 1999, that has reinvigorated

the debate over whether, when, why, where and how intervention would be appropriate. It is likely that this debate will only intensify in the near to medium term.

The key challenge in regard to the question of intervention in the post-cold war era is how to manage, more effectively, the collective response to intrastate or communal strife. This type of intervention is often highly complex both in political and practical terms. A consensus within the UN Security Council, in regard to the most appropriate international response to the outbreak of communal conflict, is often difficult to establish and even harder to maintain. It is this factor, coupled with the recognition that the UN lacks the capacity to conduct enforcement operations, which has led to a rise in the incidence of extra-UN interventions. Given that many key Member States have made clear their reticence to equip the UN with the independent force capacity necessary to conduct such operations, it is imperative that the Security Council develop better strategies for managing interventions conducted outside its collective framework. These strategies must indicate, without ambiguity, where the responsibility for the outcomes of interventionary operations lies, whether this be with the UN, the regional organizations involved or specific states.

The first step in developing such strategies would be to devise a set of clear conditions that would ensure effective multilateral interventions. One such set of guidelines may include:

- Outside powers must have a clear political objective
- Outside powers must correctly identify and assess the political, economic and military characteristics of the group that they seek to coerce
- A leader is needed to guide and coordinate the coercive action
- That leader must build widespread international support for the operation
- Sufficient resources must be made available
- Outside powers must develop an appropriate strategy that includes escalation, exit and post-intervention stages

Furthermore, while the stated intentions behind the increasing number of humanitarian military interventions may be admirable, they do not decrease the need to elaborate a legal framework for such operations when they occur outside the UN framework. For instance, an adequate legal framework could be elaborated based upon the rights that states enjoy, under the UN Charter, to undertake humanitarian interventions through regional organizations. Inviting the International Law Commission to express an opinion on legal issues pertaining to humanitarian military interventions would also assist in developing a coherent legal framework for such interventions. All these options need to be considered in more depth, and it is here that the academic community could once again play a useful role.

When interventions are conducted outside the UN framework of collective action, the UN must actively monitor the overall progress of the operation and also the actions of the parties and agencies involved. The need for

a strong UN monitoring role is made even more cogent by the rise in the number of private armies involved in various unstable regions around the world. When the UN itself engages in humanitarian interventions it must identify ways in which these interventions may be more effective. An obvious step that should be taken is to improve the level of coordination between relevant UN agencies, and between the UN and other humanitarian agencies. Moreover, the UN must attempt to address complex humanitarian emergencies in a more comprehensive manner in order to ensure that its achievements are sustainable over the long term. The framework within which the UN and regional organizations approach the post-intervention stage of an operation should be strengthened.

To be made more effective, humanitarian interventions must be studied in more detail at both a practical and conceptual level. Research institutes and universities would be well placed to undertake a thorough examination of the intellectual and moral dilemmas involved in these types of interventions. Similarly, the UN could undertake a constructive study of the question of humanitarian intervention and explore the possibility of establishing an independent group of non-governmental experts who would assist in this process.

Defence

The end of the cold war has brought about a reduction in military expenditures and international arms transfers, both in terms of world totals and for most regions and countries in the world. The level of arms transfers decreased at the beginning of the post-cold war period, although recent figures indicate a possible shift towards an upward trend. Similarly, world military expenditure may be experiencing a shift towards a slightly upward trend.

The end of the cold war, and increasing levels of globalization, have had a mixed impact on the arms trade. Commercial calculations now play a much greater role in the arms trade than ideology. In addition, globalization has increased access to and the spread of various types of arms. The economic forces associated with globalization have led to an increase in the transfer of dual-use technologies, some of which have military applications.

The amount of global economic resources spent on military activities is staggering. In 1998, world military expenditure corresponded to 2.6 per cent of the world GNP. As a global average this corresponds to US\$ 125 per capita, which is almost half the per capita GNP for a number of African countries. The key challenge for the UN in this area is obvious: namely, how to reduce world military spending and redirect the released resources to more economically and socially beneficial uses, while at the same time enhancing the security of the world's population. Given that no state is likely to volunteer to surrender its right to possess military force, another key

challenge relates to the development of policies and measures that improve security regimes and security in all its aspects – international, regional, national and human – and, in particular, to the development of new non-military policies and measures capable of providing security.

Coupled with these challenges is the need to ensure that there is an appropriate match between existing security requirements and the size of the military establishment, and to reduce the waste and inefficiency that is common in the military sector. Further research is necessary if it is going to be possible to devise ways in which the domestic, personal, economic and political “vested interests” that act as obstacles to the reduction of military expenditures may be reduced. It will also be necessary to examine the origins and mechanisms of such “vested interests” in order to formulate policies and measures that address their causes rather than simply their effects.

A number of practical steps could be taken in an effort to meet these challenges at their core. These include open and democratic participation in the formation of defence and security policies, arms procurement decision making, and budgeting processes. It would also be useful (and the academic community could assist in this task) to identify excessive military expenditures and establish priorities in the allocation of public resources between military and non-military purposes. A review of existing UN initiatives for the reporting of military expenditure and international arms transfers would also be beneficial, as would the development of new forms of arms control measures that are better suited to the post-cold war security environment. It is also important that any progress made in relation to these tasks be quickly cemented through international agreements in order to discourage reversal.

Any new international agreements that are negotiated must be made to be relevant to the post-cold war security environment. A daunting task, within this context, deals with the question of small arms. Such weapons cause most of the casualties and injuries in current armed conflicts. To date, however, there has been no serious attempt at controlling, or even monitoring, the trade or transfer of small arms. The academic community could play a critical role in exploring the possibility of creating a regulatory regime for doing so.

Another significant contribution to be made by the academic community relates to the question of demand in the arms trade. Effective monitoring and control is just one aspect of any attempt at arms reduction. It would be impossible to devise a workable long-term solution to the problems posed by armaments of any kind without attempting to address the *raison d'être* of arms purchasing: that is, conflict or insecurities relating to the threat of conflict. How to address the complex web of economic, political, environmental, religious and other factors that comprise the root causes of conflict is a daunting question, but it is one that must be explored comprehensively. It is worth noting that the growing tendency towards unilateralism has a negative impact on arms control in that it increases the level of instability in

the international system. Another destabilizing factor is the growing phenomenon of private security forces.

Alliances

According to the UN Charter, it is the Security Council that retains primary responsibility for the maintenance of international peace and security. Yet, regional action that occurs within the context of decentralization, delegation, and cooperation with UN efforts could not only lighten the burden of the Council but also contribute to a deeper sense of participation, consensus and democratization in international affairs. If this is to be the case, however, a clearer framework must be developed for the practical interaction between the UN and numerous regional organizations, as the guidelines that exist within the UN Charter are often insufficient. This is particularly the case in regard to the question of retroactive authorization for regional interventions, such as Kosovo.

While the Security Council's use of "coalitions of the willing" would have the potential to help avoid delays in UN action, there are several shortcomings that exist within the various regional frameworks of action that must first be addressed. One of the most pressing of these shortcomings relates to the lack of financial and other resources of most regional organizations, particularly those not located in Europe. To reduce the current UN reliance on the US and NATO for peace operations, there is a need to match the resources of regional organizations to their mandates. How this could be achieved needs to be explored by the UN, the academic community and the regional organizations themselves.

Regional organizations may also prove to be more effective than the UN in terms of their ability to engage in constructive conflict prevention efforts. For this reason, regional organizations should be encouraged to make an effort to be more inclusive and to engage potential adversaries in order to promote understanding. The establishment of "Track Two" diplomatic channels, for example, could assist greatly in increasing confidence and reducing insecurities at the regional level.

The challenge here must not only rest with the UN. Member States and relevant regional organizations must also work to provide the impetus for a shift from a discussion of the potential for conflict prevention activities, to the implementation of such activities. The UN Secretariat, particularly, is unable to shoulder this burden alone as it is itself under-resourced and tends to be crisis driven. This means that the Secretariat often has little time available to engage in proactive actions such as comprehensive conflict prevention.

As conflict prevention involves a number of economic, political and social factors, it requires a much greater level of collaboration between the different UN agencies and between the UN and other actors. A more concerted

effort could be made to ensure the inclusion of non-state actors and NGOs in the practice of conflict prevention. It would also be productive if these bodies were more effectively engaged within the other stages of UN peace operations. Similarly, it is critical that many of the changes resulting from the end of the cold war are recognized by incorporating civil society into the security architecture of the twenty-first century. While taking these recommendations into account, the need to enhance the capabilities of the UN must not be ignored. Once a conflict begins to display signs of spilling over into violence, the UN remains the only global collective security institution with an acknowledged mandate to take responsibility for threats to international peace and security wherever they occur.

Much more research is required with regard to the potential effectiveness of various conflict prevention policies and measures, whether they be conducted by regional organizations or the UN. Given the lack of genuine consensus in terms of value systems in the developing countries, and between them and the West, it would be particularly beneficial to explore the potential for conflict prevention in this regard.

It is also important that the academic community take up the challenge of exploring the role of sovereignty in conflict resolution strategies. While conceptions of sovereignty may be changing, states retain a strong preference for non-interference. The tensions between the need to take decisive action in the face of violent conflict and the need to respect sovereignty results in conflict resolution strategies, on behalf of the UN and regional institutions, that often have unacceptably destructive consequences for civilian populations. Is the contemporary state-centric order, including its regional and international institutions, increasingly ill-suited for remedying the human security dilemma presented by contemporary conflict? This is an important question that needs to be examined.

Weapons of Mass Destruction

The current situation has some encouraging, albeit much overlooked, characteristics. Most states are committed not to acquire weapons of mass destruction through their membership of the Nuclear Non-Proliferation Treaty (NPT), the Comprehensive Test Ban Treaty (CTBT), the Chemical Weapons Convention and the Biological and Toxin Weapons Convention. Furthermore, weapons of mass destruction have not been used since the end of the Cold War, with the sole and limited exception of chemical weapons making.

Globalization has been simultaneously beneficial and harmful in relation to the spread of weapons of all three categories of weapons of mass destruction. In making it harder to control knowledge, technology and expertise, globalization makes it harder to control the spread of weapons of mass destruction. Yet, developments in information technology are permitting wider dissemination of information more quickly to all parts of the globe,

enhancing transparency and empowering those seeking to contain or end the weapons of mass destruction threat. Moreover, the inability of governments to control the flow of information makes “societal verification” more likely.

Despite these positive aspects, however, and also half a century of efforts to rid the world of all three categories of weapons of mass destruction, the setbacks have outweighed the victories. As we enter the new millennium, a dramatic new initiative is required to break the gridlock that has developed between nuclear disarmament, ballistic missile defences and nuclear non-proliferation. As the predominant world power, only the US is in the position to take a unilateral leap or propose a package deal to move the process forward. In significantly reducing its own reliance on nuclear weapons and moving towards nuclear disarmament, the US could reduce Russian insecurities in regard to its own enforced nuclear disarmament. Such moves, coupled with greater efforts to increase transparency, would also encourage other states to take a more favourable view to the perceived US need for limited missile defences, help kick-start the Fissile Missile (Cut-Off) Treaty negotiations and restore the faith of non-nuclear weapons states in the NPT. With regard to biological weapons, the US could use its influence to bring the Protocol negotiations to an early and successful conclusion.

While the US has a significant role to play in regard to disarmament and arms control issues, this does not absolve the rest of the international community and the UN from their responsibilities in meeting current challenges. It is only a collective effort that will deal with the challenge posed by the few states that flout international opinion and non-proliferation norms in one or more of the categories of weapons of mass destruction. Another key challenge to be addressed relates to the potential for Russian “nuclear leakage.” So far, the US has shouldered most of the burden in addressing this challenge. Europe, in particular, could play a much more substantial role in this regard. Similarly, the UN, given its unique position in the international arena, could act as a catalyst in obtaining some of the assistance that will be necessary to help Russia dismantle existing nuclear warheads.

At a general level, greater attention must be devoted to verification and compliance in order to ensure that they do not become brakes on disarmament efforts but, rather, provide the necessary confidence for proceeding forward. How verification can provide sufficient confidence remains controversial, as the recent ratification debate over the CTBT in the US Senate demonstrated. While much has been learned from past experiences, more research is needed with regard to the development of innovative verification techniques and technologies. At present, most research occurs in the US. The academic community, and the UN organization, could potentially contribute greatly to the development of new methods of verification and monitoring. Academia may also contribute much to the development of more effective responses to non-compliance with disarmament and non-proliferation agreements. The current practice of leaving the questions of penalties for non-compliance up to the UN Security Council is not always

effective, and the viability of alternative methods and institutions should be explored.

The UN must address its shortcomings in the nonproliferation and disarmament field and harness the new creative and community-building possibilities of globalization to advance the cause. A number of specific recommendations can be made with regard to the role of the UN in this area. Most of these recommendations are aimed at revitalizing existing efforts undertaken within the framework of the organization and making them more efficient and effective. They include:

- Exploring the possibility of establishing an institution similar to the Nuclear Proliferation Data Exploitation Center recently announced by the US government;
- Replacing the Regional Disarmament Centres, which have had limited success, and creating innovative regional initiatives that could utilize modern information technology to create virtual regional webs rather than static centers;
- Providing regular budgetary support for the UN Institute for Disarmament Research (UNIDIR) and linking it to an academic institution (the United Nations University would appear to be an appropriate partner). UNIDIR could also become more involved in capacity building, perhaps in cooperation with the UN Institute for Training and Research (UNITAR). High-level efforts could also be made to secure funding from private foundations;
- Reforming the Conference on Disarmament, particularly with regard to its agenda setting and voting procedures.

Most arms control and disarmament efforts to date have been state centric and the entire process is becoming, to a great extent, treaty bound at the multilateral level. To reinvigorate and restore faith in the process, new types of thinking are required. An effort to bring civil society, including non-governmental organizations, academics and informed publics, into the process could contribute substantially to such efforts. The negotiation of the Ottawa Convention on Antipersonnel Landmines stands out as an example of how the distance that exists between government and civil society can be reduced, and useful partnerships can be formed with regard to disarmament issues.

“New” or “Non-Traditional” Security

Since the end of the Cold War, “new” and “non-traditional” security challenges have become a source of growing concern around the world. Indeed, many expect them to become the dominant security challenges of the new millennium. An orthodox view of the post-cold war security environment would suggest the retention of a state-centric system. This system would be full of traditional types of threats, only they would involve different enemies

and different means of inflicting harm. A more normative view, however, would support a reconceptualization of security that puts primary emphasis on protecting the well-being of the people of the planet in general, rather than the survival of the state. The two are not necessarily mutually exclusive. The defence of the state as a policy goal can coexist alongside a desire to improve the human condition regardless of geographical location or citizenship.

That the general public's conception of the security environment has altered so dramatically as we enter the new millennium is an indicator of how significantly this environment may have actually changed. Security is no longer perceived in terms that are limited to the realm of presidents, prime ministers and nuclear weapons. One of the major factors leading to this dramatic public reconceptualization of security is the increasing level of globalization that has led to the loss of de facto sovereignty for states, particular in relation to economic issues. Globalization has engendered a growing sense of vulnerability to what were previously considered to be remote threats, such as distant conflicts, contagions, crop failures and currency fluctuations.

Globalization has led to an increase in insecurity in regard to several issues. The process has lowered the barriers to the worldwide diffusion of relevant technologies, materials and expertise for rogue states to develop or purchase weapons of mass destruction and their delivery systems. Separatist movements, religious cults, anti-government extremists, terrorists and organized crime syndicates, including drug trafficking cartels, pose a physical threat as well as a threat to computer systems and networks. Globalization has also led to the widening of cleavages within states, and the results of this may prove to be fatal in some instances. What has added to the sense of insecurity is a lack of understanding about the processes of the institutions associated with the forces of globalization and general fears about what globalization means for the individual. In this regard, the demonstrations at the December 1999 World Trade Organization ministerial meeting in Seattle highlighted the fact that civil society must be more involved in international decision making, and that international institutions must be much more transparent.

Yet globalization is not the only source of insecurity in the world of the twenty-first century. The largely uneven spread of rapidly developing technologies has offered some parts of the world significant benefits, but it has also resulted in the rise of new forms of security concerns. The increasing reliance on the Internet, for example, represents a new opportunity for the rapid delivery of information and educational resources, yet its own vulnerabilities also pose a unique threat to security. While there is some dispute as to whether epidemiological threats constitute a threat to security, for some states, particularly in Africa, HIV/AIDS has a very real impact on the security of many individuals and communities. Similarly, for some parts of the world, the threat posed by unchecked and often irreversible environmental

degradation is quite real. Furthermore, it should not be overlooked that the most significant and immediate threat to the security of individuals in the post-cold war era is more often than not their own state.

It has generally been recognized that many of the new and potential challenges to security can only be addressed effectively if they are addressed collectively. As the UN is the only international organization with a truly global reach, it has an even more crucial role to play in maintaining international peace and security in this new era. The UN could play an important role in helping address many of the new and non-traditional security challenges by providing leadership, legitimacy, scientific expertise and logistics to the international community's cooperative efforts. The UN is also uniquely placed to play an enormous role in terms of ensuring that the ever-growing web of international institutions not be allowed to become fragmented, disjointed and overlapping. Similarly, many of these international institutions will play a great role in encouraging the shift in national priorities towards human security issues, and it is the UN that is in the best position to have the greatest role in this regard.

If the UN is to take up its new role effectively and enhance its capacity to maintain peace and security, it must reform itself and adapt to the new security climate. The increasing prominence of economic rather than political actors in the international arena requires that the UN establish a greater presence at the private sector level. One significant contribution that could be made by the organization at this level would be to set a code of conduct relevant throughout the entire private sector.

Conclusion

The world as we enter the new millennium is dramatically different from the one we had become used to over the last fifty years. Many states have changed in character and structure, and in political, economic and military might. Many of the ideas and ideologies that preoccupied national and international policy makers in the middle of the last century have proved to be either inaccurate or inadequate. And many of the traditional threats to international peace and security have either receded or been resolved. Throughout this period of turmoil and change, however, one thing has remained constant: the Charter of the United Nations.

If the UN did not already exist, it would have to be created in some form now. The world has, perhaps, never had such a strong need for a universal institution with the capacity to coordinate the activities of the myriad of actors that impact on human security in a variety of different ways. So much of our new world is yet to be understood, and so many of its structures and institutions are yet to be created. Still, we enter this new millennium with a new-found recognition that all humanity shares the same fate, and that threats to security can no longer be contained within borders or isolated by oceans. If the United Nations succeeds in adjusting to this new world, if it

reforms its structure and practices, and learns how to share its burden effectively and efficiently with other actors and institutions, it may finally succeed in realizing the goals of its founders, which are embodied in its Charter.

Note

1. The international debate arising as a result of the NATO-led intervention in Kosovo, which occurred without explicit Security Council authorization, may be seen as evidence of this.

Governance

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Introduction

This chapter explores innovative ways in which the international community could address key international challenges of governance by highlighting and discussing recommendations and proposals in the areas of democracy and democratic regression, decentralization and local governance, international law, human rights, global public goods, and civil society.

Although not discussed *per se*, global governance emerges from these recommendations and proposals as multi-dimensional in two senses: It comprises political, economic, social, cultural and security aspects, and it is multi-agent by involving the State, inter-governmental organizations, civil society, economic actors and the general public. Its manifestations are both formal and informal, concerning global public goods and global problems, not only at the global level but also at the regional and local level. Global governance is the generation of, and the response to, shared values by various actors, giving rise to a collective process to identify issues, form an agenda, arrive at an outcome, and make arrangements to implement it.

The several aspects of global governance are often analyzed in the context of continuing globalization. An overriding theme is that global governance must be oriented more around the equitable distribution of the positive effects of globalization, both within and amongst countries, in such a way that diminishes inequality and promotes sustainable human development.

Democracy and Democratic Regression

Whilst the procedural tenets of democracy are clearly proliferating, the substance of democracy does not always necessarily follow. Regression to

authoritarian tendencies, either through coup d'état or through a more insidious undermining of the bases of democracy, cannot be excluded. This brings the issue of how the international community can effectively and efficiently support countries to establish and consolidate democratic regimes. In principle, democracy promotion is more effective when based on “carrots” rather than one based on “sticks,” with long-term technical assistance playing a most important role.

There is also the question of which type of democracy to choose for a particular state, and the implications of adopting mixed democratic models. General awareness of the need to balance the civil, economic and political aspects of freedom in a democracy is now high. The formula between the three cannot be fixed for any one time or for any one state, and a number of variations should be anticipated. Disdain for one-day democracy – democracy only on an election day – has echoed as calls for more emphasis on the development of a democratic political culture rather than on the democratic system have been increasingly advanced.

The system should follow the development of a democratic culture since even when there is some regression from time to time, if the basic democratic political culture is in place, then democracy will be able to withstand. Democratic political culture should also be regarded in general functional terms related to the question of how to make authorities accountable for their actions, how to make them responsive to their constituencies, and how to enhance a sense of participation and a quality of transparency.

Furthermore, the tyranny of the majority is always to be prevented, particularly if that could threaten the human rights of minorities. Human rights should be entrenched and not be subject to majority rule. Reality has already demonstrated that democracy and human rights do not necessarily or automatically always develop in parallel, either theoretically or in practice. Indeed, according to the tradition of liberal democracy, it can be argued that some human rights exist to actually counteract or restrain majoritarian democracy, by indicating that certain issues – such as personal privacy and minority protection – should not be subject to majority legislation.

In summary, the main recommendations and proposals include:

- Supporting, financially and technically, the various pillars of democratization processes: the rule of law, the judicial system and legislatures, in addition to assisting the holding of elections;
- Avoiding pressures for premature elections, favouring instead bottom-up approaches that privilege the creation of a democratic political culture, *inter alia* through education;
- Supporting institution-building actions so as to ensure the efficient delivery of expected goods and services by the new democratic regimes;
- Carrying out periodic assessments/audits on the performance of “democratic” institutions through national and international entities as well as the observance of the most fundamental human rights, including minority rights;
- Strengthening networks of various national actors, NGOs, civic organizations and the private sector; and

- Providing comparative information on models and systems options in order to increase the understanding of their implications of different types of democracy.

Decentralization and Local Governance

The general sense is that in governance there is movement in all directions: building across, up and down. Decentralization in its various forms – political, administrative, fiscal and economic – can be a useful instrument for building down, and enhancing human development in the medium and long terms as a consequence. Indeed, an increasing number of countries have been executing decentralization programmes all over the world. Although much more empirical research appears to be needed, such experiences throw light on the variety of components influencing successful outcomes – the so-called enabling environment, the role of participation and the forging of partnerships amongst the various actors, and the importance of initiative and leadership.

The challenges involved in decentralization programmes are enormous. They range from forging effective delivery of services that increase human development to avoiding the dominance of local élites, from ensuring the active participation of local government, non-governmental organizations (NGOs), and private actors to ensuring that resources match delegation of responsibility. Nevertheless, if not properly planned and carefully implemented, decentralization can have adverse effects on governance, or even cause further disruption and fragmentation. Accordingly, decentralization is to be regarded only as the starting point of a long and larger process aiming to improve governance and human development.

In brief, decentralized governance should be favoured with the following recommendations and proposals in mind:

- Creating an enabling environment for decentralization to succeed, including government policies and attitudes about local governments;
- Creating carefully crafted new institutional structures that go beyond the common “business-as-usual” approach and alleviate the resistance of existing institutions to change;
- Ensuring broad participation of civil society and private actors and creating space for innovation and local leadership;
- Providing appropriate technical assistance, training, capacity building and information; and
- Integrating key components of local governance and service delivery systems rather than focusing on single dimensions.

International Law

Intrinsically inter-connected, the development of international law and that of the United Nations organization occur in parallel. As a treaty, not only

does the Charter of the United Nations belong to the realm of international law, but it also draws on the legal discipline to fulfil its main functions. Amongst them, there are the peaceful settlement of disputes carried out through a variety of means or judicial settlement, and the protection of the most fundamental human rights made possible through the creation of treaty and non-treaty mechanisms and the establishment of international criminal jurisdictions. The proliferation of these mechanisms and jurisdictions raises questions related to their respective achievements and limitations as well as creating an opportunity for improving their coherence and efficiency.

The challenges in the field are enormous and involve political, institutional and financial dimensions. These are *inter alia* ensuring that all States abide by international law equally and irrespective of their power, improving cooperation between member States and the international criminal tribunals in carrying out arrests as decided by prosecutors, as well as ensuring that they have the necessary resources to fulfil their mandates.

The evolution of norms and the setting of standards in a wide variety of domains are of particular concern. In this context, the role of observers to check the implementation and the application of such norms and standards seems to be a more efficient one than is often believed, particularly in a long-term perspective. Over time, such observers can develop an effective and significant role; thus, the implementation of systems of monitoring and supervision are deserving of more attention and support.

The main recommendations and proposals relate to:

- Linking the nationality of the judges to State acceptance of compulsory jurisdiction – only judges who are nationals of States having accepted the compulsory jurisdiction would be entitled for nomination to the International Court of Justice;
- Limiting the power of veto of permanent members of the Security Council to ensure consistent enforcement of the judgments of the International Court of Justice;
- Expanding the jurisdiction of the International Court of Justice to non-state actors, such as international governmental and non-governmental organizations, political entities, transnational companies and individuals, as well as allowing the United Nations Secretary-General to request advisory opinions;
- Empowering the International Court of Justice to review the interpretation and application of international law by other jurisdictions as well as establishing smaller subordinated chambers to improve efficiency;
- Making the United Nations Administrative Tribunal easily accessible to United Nations staff members working in cities other than New York, for example, by adopting a circuit court system as well as improving the public accessibility of its proceedings and decisions;
- Calling for member States to be generous in their contributions to support the work of the international criminal tribunals as well as to cooperate fully with arrest orders;
- Mandating the International Law Commission (ILC) to draft an interna-

tional criminal code to be applied by these tribunals as well as the recently created International Criminal Court; and

- Establishing closer links between the ILC and other UN standard-setting organs, such as the Human Rights Commission and the Disarmament Conference, so as to improve their efficiency.

Human Rights

While the promotion and codification of human rights is undoubtedly one of the most important achievements of the United Nations, the start of the new millennium constitutes an excellent opportunity to reflect on how further to improve the efficiency and effectiveness of the United Nations human rights system. One of the most pressing challenges relates to strengthening the role of human rights as a counter-balance to narrow interpretations and applications of globalization. Enhancing the social dimension of globalization and ensuring better integration between human rights and the activities of international financial institutions and transnational corporations are of the utmost importance.

The establishment of an on-the-spot human dignity regime at a local level in many cases where human rights are under threat, or where there is a disaster of human or natural sort, should be more strongly supported. This would involve the working together of the UN Agencies such as the High Commissioner for Refugees, the High Commissioner for Human Rights, the United Nations Children's Fund, the World Food Programme as well as the International Committee of the Red Cross and other organizations, including those from the profit-making sector.

However, there will be always a danger of politicization associated with many conflict situations, particularly where humanitarian and protection agencies are associated with enforcement measures, and especially by actors other than the United Nations, such as the North Atlantic Treaty Organization (NATO), the Commonwealth of Independent States (CIS) and the Economic Community of West African States (ECOWAS). This process could lead to a de-legitimizing of the United Nations and its partners and make it more difficult for them to operate in areas under the control of deviant actors where *a fortiori* there may be many victims in need of protection and assistance.

In brief, the main recommendations and proposals are summarized as follows:

- Improving the partnership between the United Nations, international financial institutions and transnational corporations for the protection of human rights standards around the world;
- Ensuring observance of and paying attention to economic, social and cultural human rights as much as to political and civil rights;
- Establishing a 'human dignity regime' which consolidates refugee, humanitarian and human rights protection at the field level and reinforces

the protection and assistance that has been carried out by several programmes and agencies;

- Requiring states to report on measures taken to teach human rights and international humanitarian law to military personnel seriously so as to improve the treatment of civilians in armed conflicts;
- Establishing a compulsory funding mechanism for the equitable implementation of human rights activities; and
- Continuing with conferences and other forms of education leading to the creation of a human rights culture.

Global Public Goods

The notion of global public goods appears to acquire particular importance in view of globalization. Defined as public goods whose benefits extend across borders, generations and population groups, global public goods risk being under-provided in the absence of any recourse to an international collective-action mechanism or institution. This highlights the need to encourage international actors to acknowledge that a proper consideration of self-interest includes an element of community interest, and that a greater balance between the activities of private and the public actors needs to be achieved. Mechanisms that encourage equitable access to global public goods, and a fair cost-sharing in the production of global public “goods” and control of “bads,” need to be developed.

One way this has been achieved is through the organization of global conferences and follow-up conferences on the most pressing world issues. These are recognized as an important systemic strength, not only because they represent opportunities to tackle crucial global issues, but also because of their multi-stakeholder character, as they involve civil society, businesses and other constituencies in policy-making and implementation. These efforts should therefore continue and be enlarged to include more participants of developing countries.

Alternative ways of improving the global management of public goods involve some degree of institutional reform, such as the establishment of a Global Trusteeship Council (a regime to maintain global public goods) under the United Nations General Assembly (echoing a suggestion of the Secretary-General), or enlarging the composition of Member-States delegations to the General Assembly so as to include parliamentarians.

The recommendations and proposals can be summarized as including:

- Enhancing the understanding of global public goods by creating a global public goods knowledge bank managed by the United Nations, making use *inter alia* of the full possibilities offered by the information technology era such as Web sites, Internet conferences and other means of electronic communication;
- Continuing to promote cooperation mechanisms as well as carry out world conferences to achieve consensus on the common public goods;

- Creating a global trusteeship council under the framework of the General Assembly to give early warning about global public goods and promote their production;
- Promoting participatory policy-making where the United Nations becomes a multi-actor venue (NGOs, business, media, grass-roots activists) or even a tripartite body (states, business and civil society); and
- Changing the composition of Member-State delegations in such a way that the United Nations becomes more of an inter-parliamentary body. This would have the advantage that the members of national parliaments could become a support group for, or at least become knowledgeable about, the United Nations and its programmes within national political systems.

Civil Society

Changing ideas about international development, new conceptions of governance and commercial considerations are all contributing factors to the rise of civil society on the international landscape. The rhetoric of partnership and participation in promoting sustainable development has come to stay, definitely placing civil society at the centre of decision-making and problem-solving at the global level. Accompanying such a transformation, a range of new challenges is facing both the United Nations and non-state actors in global governance.

The main challenges involve not only ensuring NGOs and community-based organizations become more legitimate, accountable and representative, but also connecting coherently the local and the global so as to avoid the tendency by some NGOs to focus on global advocacy to the exclusion of national or local processes. Another important element conditioning such cooperation is the ability of civic groups to move from “conversion strategies” (the traditional view of advocacy) to “engagement strategies” (aim to support a process of dialogue) and of international organizations to view non-governmental actors as real partners in global governance.

A summary of the main recommendations and proposals would be:

- Encouraging civic groups to spend more time and resources in building constituencies for international cooperation;
- Supporting civic groups so they can develop a range of new skills and competencies in learning, bridging, communications and mediation;
- Generating a “safe space” in which civic groups, governments and business exchange ideas and create a dialogue about global governance issues;
- Encouraging the broadest possible range of civic organizations to participate by providing additional support for Southern or Third World groups – if necessary, by restricting the number of Northern groups; and
- Creating independent funds to finance NGO activities.

The International Millennium Survey

The International Millennium Survey was a major survey involving some 57,000 adults from 60 different countries, conducted between August and October 1999 at a cost (out of Gallup's own resources) of some 3 million euros. The survey covered topics related to people's basic values and issues. Despite some methodological constraints, the survey encompassed a wide range of questions related to democracy, the United Nations, human rights, women's rights, environment and religion, and was the largest ever undertaken.

The United Nations Charter begins with the phrase "We the peoples..." But that phrase is surely economical with the truth, since it should really read "We the governments of the Member States of the United Nations..." It is in this context that the survey is fascinating because for the first time it is possible to have some idea of what "we the peoples" might actually think. Interestingly, the results revealed a remarkable similarity across countries and cultures, as follows:

- A significant consensus on what matters most in life – "to have a happy family" and "good health" – as well as on what matters less in life – "being faithful to my religion" and "to have a good standard of living";
- Significant concern on two issues – the current state of the environment and the need to protect human rights – and the fact that governments are doing too little to address these problems;
- Partly as a corollary of the above, the most important roles of the United Nations were regarded as being to protect human rights and to give humanitarian aid in times of natural and man-made disasters;
- A great level of dissatisfaction with the way democracy works in our societies, even when they are considered to be democratic – there is a sense of impotence in view of the inefficient, unresponsive and unjust ways in which governance takes place; and
- A relatively high level of satisfaction with the United Nations' performance, including in countries where there was intervention.

The survey revealed that there is a very high degree of shared values, thus giving lie to the cultural relativist approach to human rights. The evidence was clear that there are universal shared values giving rise to a common conception of basic human rights. Moreover, insofar as the questions asked on the United Nations are concerned, it was very evident that the first wish of the peoples, if not of their governments, was that the United Nations should make its highest priority the promotion of human rights.

But the survey also revealed that economic growth and standards of living were not the top priority of respondents all over the world – and here, there is a message for the international financial institutions, the UN agencies and the Economic and Social Council. More important than economic growth and standards of living are health, the family, freedom and the possibility to live in peace.

One finding that was particularly interesting related to liberal democracies in developed countries. Although the respondents thought that elections were fair, they also thought that their countries were not governed by the will of the people. In other words, the institutions are judged to be democratic, but the people do not feel empowered. Such disappointment signals not only that constituencies are aware of disparities or gaps between electoral programmes and their actual implementation, but also that they want to be listened to and have a chance to participate more after having elected their representatives.

Conclusion

Sovereignty and globalization emerge as the two constant variables underlying the recommendations and proposals presented and discussed in this chapter. Despite being often displayed as irreconcilable, if not as a dichotomy, they are in reality inter-connected and seem to condition the existence of one another. Sovereignty constitutes a fundamental reference: the world is, and will continue to be, characterized by sovereign states in spite of the globalization trend. Globalization, on the other hand, does not seem to be attainable by those in fragile jurisdictions, where there is total absence or limited domestic governance.

Global governance therefore has to be considered in relation to the state, to the extent that more effective and efficient domestic governance may have a positive impact on global governance. Calls for the promotion, consolidation and renewal of democracy together with well-planned forms of decentralized governance – that aim to forge sustainable development and ensure the most basic human rights *within the state* – have demonstrated this. All forms of governance must rest upon due regard and respect for distinct and ingenious models, the assimilation and representation of particularities and diversities of each country, in such a way that enhances empowerment and participation at all times.

Globalization is also a variable to be taken into consideration. In spite of being frequently associated with the weakening of sovereign territorial borders, globalization is within the reach of relatively few states of the world. The challenge resides therefore in coping with the adverse effects of globalization within countries as well as extending its benefits to the rest of the world. This necessarily implies an understanding of globalization that goes beyond the international movement of goods, capital and technology. The notion embraces a much more complex process with ramifications in social, political and cultural dimensions. It is not surprising that claims for the fulfilment of social, economic and cultural human rights for all people as a form of enhancing globalization, if not providing a counter-balance to economic and market-oriented globalization, emerge as an imperative.

The role of the United Nations in global governance is also a hybrid one. In spite of power politics and the pursuit of national interests by states, it is a

fact that some degree of collective management of global public goods has been attained. Although much more remains to be done, this feeling of partial achievement allows for viewing the United Nations as a means of bringing about transformations at different levels, from the local to the state, from the regional to the international. To advance further in this sense, this set of recommendations and proposals indicates, however, that the world organization needs to move from rhetoric to practice in a range of issues such as democratization, participation and empowerment.

Democratization should also be pursued within the United Nations, not only through reforms that will better reflect the geographic distribution of representation amongst states, but also by increasing the participation of non-governmental actors in the political bodies. The United Nations system is not to be regarded as *the* agent of global governance, but as part of the process of global governance. (this, however, only on the condition that it opens the door more widely to civil society and other non-state actors). Therefore, the United Nations must not take itself for granted as the leading actor in global governance. The United Nations rather should ask itself where its comparative advantage lies in a particular area, and having identified it, it is to that comparative advantage that its best efforts should be directed.

Finally, the opportunity should be seized to identify messages deriving from recommendations and proposals that could be directed to specific audiences or target groups: policy makers, whether at governmental or inter-governmental levels, the scientific community and the public at large.

Policy Makers

While the majority of the recommendations and proposals are clearly directed to policy makers, two observations of a consolidating character can be made. The first refers to the interconnectedness between all levels of governance – the global, the regional, the state and its sub-levels. Policy-making can no longer be done in isolation, as decisions on any of these levels have an impact on the other levels as well as across levels. This requires even more dialogue, involvement and participation of all concerned. The second refers to the identification of certain priorities for action, which are basically securing peace, protecting human rights and preserving the environment, and this again has relevance to all levels of governance.

The Scientific Community

Research for what purpose? Whether pure, applied or action-oriented, research should provide the foundations for policy-making as well as the tools for advocacy by non-governmental actors. It is important in this context that research be conducted on topics of direct relevance to these groups, and its findings presented in a form that they can easily grasp. Amongst the several

topics deserving further analysis, two have been mentioned in the recommendations and proposals. The first requires a comparative study of the different democratic models available as well as the implications involved in adopting each model, including mixed democratic models. The second refers to further clarifying the ingredients of successful decentralization and what may constitute an enabling environment for its implementation. Many others could still be identified, highlighting the importance, above all, of keeping the doors of dialogue open between the scientific community, policymakers and the public at large.

The Public at Large

Constituents in politics, employers and employees in the private sector, members of communities and organizations of civil society – the role of the public at large emerges both as individuals and as members of a collectivity. Hence the importance for them not only of becoming aware of governance issues that affect their lives and that of their communities, but also engaging in participatory approaches towards solving the most pressing issues. Access to governmental and inter-governmental forums implies new forms of responsibility that can be exercised through advocacy as well as through direct engagement. This is, however, dependent upon the level of organization of civil society. The more organized it becomes, the more it will be able to contribute to policy-making and implementation.

Note

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Environment

Hans van Ginkel and Jerry Velasquez

Introduction

The impact of human activities on the planet's environment and natural resources has steadily, and often dramatically, increased during this past century. Although the developed countries have made significant strides in reducing water and air pollution, the overall picture we get is that nature is under siege. Population growth has emerged as the most significant driving force behind environment problems and concerns. This, in turn, has strongly influenced patterns of intense urbanization and often led to undesirable trends in consumption of resources. These problems have been exacerbated due to uneven and inequitable geographical distribution of resources and rates and patterns of development, which has deprived about a third of the world's population adequate access to these resources.

Eight years after the Earth Summit and at the threshold of a new millennium, we are faced with a wide spectrum of complex environmental problems that are inter-linked and interdependent. Some may claim successes on the ecological frontiers in the wake of embracing Agenda 21 and the events and conventions that followed it. However, realization of the complexity of the problem is bringing to the forefront more difficult challenges for us to face in the 21st century. In the UN review made during "Rio Plus Five," it was found that all unsustainable trends were worsening at a faster rate than they did during the Rio "Earth Summit" in 1992.

Trends such as increasing population, unsustainable consumption patterns and destruction of the environment have contributed significantly to this worsening picture. The UN predicts that the global population will reach 8 to 10 billion by 2050. In a world where, at present, around 1.3 billion people

are estimated to live in severe poverty, population-related issues such as food security, health and safety are posing extreme challenges, especially to different global governance structures such as the United Nations.

There is some good news on the horizon, however. Recent accounting of the natural environment in terms of goods and services indicates a tremendous economic value, where these potential valuations remain grossly untapped. As an example, opportunities for boosting food production through an “ever-green revolution” and improving access to better drugs and other pharmaceuticals based on genetic technologies remain largely unutilized. This is mainly due to public fears and non-transparency of scientific knowledge, but also due to the lack of proper knowledge and consciousness of society of both the positive and negative aspects of the use of these resources. One example of this is the sustainable utilization of biodiversity resources in some developing countries, which up to now, have not been fully understood nor sustainably exploited.

Globalization has had a major effect on the geographical distribution and impact of these environmental problems. As developing countries take an increasing share of the global marketplace, regional differences in resource use (such as energy) may be reduced, and problems that are presently only prominent in the North could mirror themselves in the South. This may be viewed in the context of the various multilateral environmental agreements, where a move from ‘common heritage’ to national ownership of natural resources is apparent. This has important implications for the world trade regime, particularly when discussing the issues of “bio-prospecting” or economic exploitation of biodiversity reserves in developing countries. The pertinent issues are not fully understood or discussed. One of the most important aspects of this is to ensure an equitable flow of benefits from such economic activities back to the developing countries.

Conversely, globalization could force cities to become more aware of environmental concerns as competition with one another on economic, social and ecological fronts make it more attractive to deal with environmental problems in an economic context. In this sense, globalization could also have significant impacts on urbanization trends and consumption patterns. The information boom brought by globalization is one example. As a result of easy access to information and generally rising concern by civil society regarding environmental problems, there is now an increasing pressure on business and industry to look at the ecological footprints of their goods and services.

In general, the international community faces a broad range of challenges and pressing global issues at the turn of this century. For the first time in history, inter-generational issues are at the forefront. This is obvious when considering loss of biodiversity that, unlike other problems we face, is an irreversible process. The nature of these challenges also highlights the need for urgent action. Some glaring examples of this urgency include such problems as (a) in the earth’s mid-latitudes, the ozone has decreased by as much as 6 per cent, causing increased skin cancer and eye cataracts; (b)

toxic chemicals, most notably persistent organic chemicals, are also increasingly being found in most components of the global ecosystems, causing damage to the endocrine system and adversely impacting fertility rates; and (c) increasing greenhouse gas emissions are worsening the global warming and climate change trends. It also may be pointed out that the overlapping effect of these stresses may actually be greater than the sum of the parts. Therefore, it is essential to take a holistic and integrated view of the problems and solutions.

Another challenge to the international community, particularly in dealing with science and research, is that of uncertainty about the future and an element of surprise. Both natural and man-made environmental disasters also carry an element of unpredictability and surprise for us all. There may be problems that we have not yet dreamed or thought of. An obvious example of this "surprise element" during the past century was the ozone hole, which no one had foreseen. Recent studies have shown that the strongest ozone depletion today is in a region where the maximum ozone concentration was found just 20 years ago. This region is also far from the CFC-release regions or areas where we would have naturally looked.

Actions, programmes and conventions over the past few decades have taught us that most effective and successful approaches to meeting these international challenges are participatory in nature. Partnerships with civil society in general, and with the population impacted by activities are crucial for success. Environmental protection activities that involve grass-root level participation have shown remarkable progress.

The UN system, and particularly the UNU, has an important role to play in finding a solution to these problems. Because of its inter-governmental nature, the UN system is a unique international forum for discussing and resolving environmental issues. This becomes more important when considering the fact that most environmental problems do not follow national boundaries, but rather impact "eco-regions," such as the watershed for a river basin, or are global in nature. Also, environmental issues cut across traditional regimes and have considerable positive or negative impacts on trade, poverty and development, human health and regional security. Again, the UN system has a comparative advantage of having institutional capacity for dealing with this wide range of issues.

Due to the challenge posed by the breadth and scope of the topic of this paper, which covers a wide range of global environmental issues, a selected set of these challenges and complex issues were selected and focused on. Cross-linkage between various issues was also discussed in some detail.

This paper is divided into two parts. The first part discusses issues under eight sub-themes: global environmental governance; water; urbanization, industry and sustainability; global food security; energy requirements for the next millennium; global governance of biological diversity; land degradation; and the atmosphere. This part of the report captures the highlights of the presentations and discussions during the session. The second part comprises recommendations where all the issues are considered in a holistic

manner. The focus is to develop specific and practicable recommendations for the three target audience groups, i.e., the policy makers (including the United Nations), the academic and research community, and civil society.

Environmental Issues for the Next Millennium

Global Environmental Governance

Environmental governance is the key issue for balancing concerns for resource consumption and depletion, human welfare, and environmental consequences. The main issue for environmental governance is also usually considered in different scales, from international, national and local, and different approaches, although there seems to be a focus on the international level and on sustainable development. At the global level, the system of environmental management is roughly considered to be moving in the right direction, with more and more instruments being developed to address various environmental threats, albeit perhaps too slowly. However, the need for faster action is still present.

At the international level, the main problem seems to be that the UN's present approach to environmental problem-solving has not been holistic. This notion of a holistic approach to environmental issues is not new, and in fact has been a key ingredient in UNCED. However, the political will and financial mobilization to make this approach a reality has been missing and urgently needs more attention. Also, the issue of the environment is a bigger challenge for the UN because the necessary prescriptive actions that are required are often not clear, and their implementation difficult. It is in this regard that an inter-linkages approach appears to be a natural way forward in the area of environmental governance. The inter-linkage approach is where the natural links and bonds of the ecosystem are taken a step further to guide policy in a coherent and holistic manner. The adoption of this approach requires both development of the necessary institutional capacity and inspired leadership.

Also, although arguable, most experts insist that a bigger problem in global environmental governance is the fact that the current capacity of the UN to handle environmental issues is not sufficient. This has caused not only missed opportunities and synergies but, more alarmingly, has become an impediment to development. The case of the linkage between the environment regime and the WTO is one example, where in leaning towards a stronger dispute settlement system, more and more environmental disputes land on the floor of the WTO for resolution.

Considering these linkages between regimes at the international level, it becomes apparent that environmental governance should be linked to other human concerns such as security, because there are multitudes of socio-economic and political consequences to environmental degradation.

With this in mind, one possible approach would be for the UN to set up a forum on ecological security. An ecological forum should have some role in evaluating the implementation of various existing regimes. The forum will not only serve to bring coherence at the international level but, if set up in parallel within the national governance structure (possibly a cabinet-based ecological forum), could also serve an important role in bringing synergy and coherence to national policy-making.

The various governance scales – local, national and global – should also be integrated in a holistic approach. In the long run, it may be more democratic (and more efficient) to involve parliamentarians in the development of MEAs and other governance institutions and mechanisms. This involvement, or lack thereof, has important consequences for the environment. Similarly, involvement of the business sector in environmental governance is the biggest challenge in the industrialized world. This is particularly important for MEA compliance issues.

Water

The main issue in water governance is availability. Most of our global water is trapped in the sea as saline water and as ice in icebergs. Also, although the available freshwater is abundant in itself, it is geographically distributed so that it is not equally available to all. These two issues, coupled with the fact that water utilization has increased three times with a mere doubling of the earth's population in the past 50 years, has created a situation ripe for increased water stress. How we deal with this water scarcity will be a major issue in the coming decades. Other important aspects for water governance are health-related water issues caused by water quality (contamination and pollution).

Although an issue for the developing world, the developed world also has an important role to play in water governance. For example, developed countries should focus more on pollution control, develop management and allocation policies and come up with equitable pricing policies. Wastewater treatment and water re-use also should be seriously considered. All of this requires sufficient financial resources. Developing countries, on the other hand, require major revision in their policy in view of the predicted population boom. Also, industrial and urban development should be given some serious rethinking in view of this problem. For both worlds, maximizing water productivity should be strongly emphasized, and demand management should be used to maximize the socio-economic benefits. Also, technology development is needed to cope with the increasing water utilization, and there needs to be a shift in the role of governments and international institutions in water management. This is required at all levels – from local to global.

Another issue that may be brought about by increasing water stress (due to water scarcity and declining quality) is transboundary conflict. In this

scenario, regional conflicts and transboundary elements between neighbouring countries and regions may increase due to water quality and quantity problems.

At the international level, the leading international body that deals with water issues, The World Water Commission, has set as its goal a specific work plan with solid objectives. However, no specific role in this plan has been identified for the UN to play. This is unfortunate since the UN has unique access to governments and can be quite helpful for international and transboundary issues. What are clearly needed at this stage are incentives for cooperation among different agencies dealing with water management.

Urbanization, Industry and Sustainability

The three domains of sustainable development are the natural environment, human resources, and economic resources. At present, in the area of the natural environment, there is a conflict between those who strive towards soft sustainability (which advocates some sort of a decrease in natural resources) and those who advocate hard sustainability (which advocates complete preservation). Although different disciplines emphasize different aspects of sustainable development, clearly some major strides have been made in some aspects of urban environmental management. For example, some strong transformations in living styles and patterns have taken place, particularly in the development of an urban lifestyle. This has caused in the incremental reduction in resource consumption per capita for certain regions.

Of the elements of sustainable development that encompass the three domains mentioned above, cities form a critical component due to the role they play on the global economic and commercial front. Of the many aspects of cities, the rate of urbanization has been the major force behind the destruction of environmental resources, both directly and indirectly, and has been a key problem for urban environmental governance.

Another aspect of cities that reflects their role in the environmental regime is energy use. Since energy consumption comprises a critical component of this urban life pattern, the cause and effect of the use of various forms of energy (such as air pollution, acid rain and other environmental problems) has also been a major concern. Energy use problems are based on economic support for fossil fuels; therefore, more emphasis has to be placed on renewable energy resources. On a temporal scale, it is important to know the significance of the year 2050, partly because, as some experts predict, the present wave of democratization and urbanization would more or less reach an equilibrium state.

In an urban setting, it is often said that the primary means of achieving industrial development without destroying the environment is the development of clean technologies, and the development of sustainable lifestyles and consumption patterns through "leadership" at national and regional

levels. (One way of promoting this pattern is for countries to enter a service-based economy. In this respect, a “function innovation” is often needed to achieve order of magnitude improvements in environmental efficiency.

The trends of urban transformation govern very much the response and action of actors on environmental and sustainable development issues. At present, there seems to be a new level of industrialization and division of labor due to globalization and the international trade regime, which has repercussions for natural resource utilization. This points to the argument that discussion of urban environmental management discussions should go beyond national boundaries.

This new urban transformation also leads to possible transboundary impacts, which would require the establishment of some form of minimal environmental standards. In this regard, the concept of subsidiarity should be very carefully reviewed and perhaps revised. Its implementation has to take place at a more local scale. Perhaps negative environmental impacts in developing countries should be included so that these countries can attain a foothold in the international market. A participatory approach (at grass-roots level, accompanied by “personal ownership”) and intergenerational equity should be incorporated into the notion of sustainable developed.

Regarding participation, it is important to focus on this issue in urban areas and not so much on definition and monitoring of indicators. Sustainability requires more than just democracy; a multi-stakeholder approach should be undertaken. Also, there are experts who argue that the UN should have the mandate to develop agreements with large corporate businesses dealing with a particular regime. In this argument, the number of stakeholders would be reduced from 188 countries to a few companies and thus make it more effective in terms of impact.

Another aspect of participation is the possible creation of a forum for linking communities and megacities probably at the mayorial level. Some experts argue that such a forum would assist in linking of policies at the city level.

Global Food Security

The world’s population will grow to 9 billion by 2050, with 90 per cent of growth in the South. This will lead to a very significant reduction of the cultivable land area per capita and also of irrigation water. The improved purchasing power and increasing urbanization also will lead to higher per capita food requirement.

Food security has undergone some radical changes in terms of availability, access and absorption (a major problem is the quality, not the quantity). Maternal malnutrition is going to lead to short- and long-term consequence for population on the whole. The challenges in food security are inequity at birth and later life as well as intergenerational inequity.

Historically, the discovery of genetic laws greatly helped in the improve-

ment of food availability and security. This was evident in hybrid and advanced varieties of rice, wheat and maize. However, recently the situation has been a bit more complicated.

The public concerns about bioethics, biosafety, biosurveillance (terminator gene production), food safety (toxic or allergenic effects), and consumer choice, are recently overshadowing the positive aspects of biotechnology.

This brings forward the discussion of the need to shift from the “green revolution” to an “ever-green revolution” that would be centered on farming systems that comprise improved management practices, including integrated pest management practices. The concept of a “virtual college” will also play an important role in this management paradigm. Integrated gene management and conservation is yet another important process at various scales; this would also require enhancement of plant quality and their sustainable use.

Equity and ethics are the way ahead, particularly when discussing various regimes such as CBD and WTO. Micro-level planning based on GIS mapping, which in turn is based on micro-enterprises and micro-credit in rural settings are also important. Technology and trade should become allies in the movement for a more equitable world.

The action on food security has to be collective, and partnerships need to be built in order for this to be successful. For example, deforestation and degradation of cropland and pastureland are major problems in Africa. About 40 per cent of the African population faces malnutrition. This highlights the need to reverse the trend of land degradation in the continent. It goes without saying that the secondary purpose of preserving the richness of biological resources is also an imperative objective related to this issue. The UN needs to redefine goals and objectives for Africa, and then assist in locating resources for achieving those goals. This requires significant capacity building on both human and institutional levels.

The biosecurity (and terminator gene) issue should be tackled by broad-based committees at the national level. These bodies should encourage transparency and dissemination of information to the general public.

Other issues that need to be considered include the exploration and evaluation of oceans as a food source, and cooperative management practices at basin-level or village-level for sustainable utilization of natural resources. For the latter, the general approach should be totally participatory and be matched by policy development. Also, the concept of a “virtual college” needs to be pursued to allow small stakeholders to access the global markets and information most relevant to them. The ethical considerations have to be re-thought, and the opportunities in biogenetic revolution should be fully evaluated and explored.

Energy Requirements for the Next Millennium

About two billion people have no access to modern energy services. On the other hand, the required economic development would drastically further

increase the need for energy. Most importantly, as discussed above, most population growth will be concentrated in urban areas. Considering that there is a linear relationship between GNP per capita (or economic development) and energy use, and also possibly between factors such as literacy or lifetime expectancy and energy use, it is expected that in parallel to the expected economic development of countries, there would be a continuous increase in the energy requirements in the next millennium.

The estimates of energy resources worldwide have continued to increase, and will probably increase further with technological developments. Several scenarios for projection of energy utilization to the end of this century show that fossil fuels will most likely be a major portion of the resource base throughout the century. It is a challenge to the UN and international community to look at policies and technologies to reach an idealistic goal of reducing fossil fuel usage to 20 per cent of the overall usage by the end of the century. It is also obvious that from now on the fossil fuel usage proportionately amongst other resources will decline in any case.

There may be some conflicts in land use based on the policy for energy usage followed. Similarly, there are several concerns regarding usage of nuclear energy and related problems. Therefore, many developed countries have opted to phase out nuclear energy plants. International security issues tied to nuclear technology and proliferation of nuclear arms will remain important and should be addressed by the UN. Education of decision makers is an important aspect to resolve the complex matters – this indicates a need for capacity building by UN agencies. Similarly, the UN should also undertake multidisciplinary training of selected professionals.

Global climate change and sea level rising are important problems in the current pattern of fossil fuel utilization. This has led to moves towards the use of several other energy resources, including solar energy and fission-based nuclear power plants. It is not entirely improbable that, with the present and predicted trends, fossil fuels may be completely phased out by the end of the century based on technological developments.

Global Governance of Biological Diversity

The threats to biodiversity are unique in that these are irreversible in nature. It would probably take about five million years to replace “naturally” through evolution the present biodiversity on a worldwide scale. The inter-generational responsibility should therefore outweigh most other concerns in the biodiversity conservation discussion. The UN should take the lead in addressing biodiversity-related issues and discussing them, because these may be too “hot” to be discussed in conventional forums.

Although we only use a small fraction of the global biodiversity – about 2 per cent of the overall number of species (this may increase to 5 per cent in the future) – some experts argue that, for a variety of reasons, we are already using too much. In the previous section, we discussed how the sustainability of biodiversity resources is an essential aspect of food security.

Related to this, three issues – biotechnology, biosafety, and bioprospecting – are the most critical in bridging the gap between perceptions of the scientific community and the general public. As for the UN, it should preserve and foster traditional management practices. This should include a mechanism for compensating those who conserve biodiversity in the face of commercialism.

Within the global governance of biotechnology, training and capacity building are important aspects of science-intensive development. In this regard, human resource development in the developing countries is the most important aspect.

In the area of scale, there are national-level concerns regarding biosafety of LMOs (living modified organisms) as well as an international concern that regulations may limit future growth of the biotechnology sector. Some mechanisms and guidelines are being developed for international sharing of benefits under the CBD umbrella. However, bioprospecting may have a negative impact in terms of global biodiversity conservation.

The problem with current international discussion on biodiversity is that it is human-centred. Perhaps other arguments, such as a bio-centred approach or an eco-centric approach, ought to be considered when discussing bioethics. With this approach, it follows that there should be equal sharing of benefits of biodiversity, and proper risk assessment should be made (extensive evaluation of utilizing and modifying the gene structure of natural living resources should be undertaken).

The UN as a whole can serve as a forum to discuss these controversial but important issues (this should also include the business sector). In the area of international law, it may even be possible to designate an ombudsman to protect non-human species. Also, for raising public awareness, symbolic species may be used about the related issues.

Land Degradation

Very large landmasses are affected by land degradation, most particularly in arid lands. Many fragile and unsuitable lands are being cultivated due to population pressures. Deforestation also has serious implications for land degradation and water resource management. Of the different ingredients of the ecological cycle, the soil is the most heavily impacted by land degradation problems. Related to this, the problem of wind erosion is particularly serious. This is because not only does it endanger the productive capacity of soils, but it also impacts the livelihood and health of people. The increasing trend of global concern about land degradation is matched by the interdisciplinary nature of the related issues. Thus, secure land use tenure needs to be encouraged.

Several UN agencies, conventions and funding mechanisms involve efforts to manage and reverse land degradation. The CGIAR also focuses on food security and poverty alleviation in developing countries. A holistic, integrated and participatory approach can be successful in tackling such a

complex problem. Rehabilitation of land degradation has to be very carefully considered and evaluated.

Land degradation should be tackled at both national and international levels. Economic incentives and population planning, compatible with land's carrying capacity, are needed at the national level. Transfer of knowledge from North to South is an important functionality that should be addressed by international agencies.

Land degradation may be difficult to define at a functional level, but is important to do so considering the inter-linked nature of the problem. As an example, there is no good understanding of dust storms in the Asian region.

Land degradation should be understood as a broader problem, with due consideration given to the underlying processes in various geographical locations. For example, the growth in domestic animal numbers by a factor of 10 in Africa has resulted in serious land degradation, that in some locations the damage appears to be irreversible.

One possible solution to this problem is increasing the value of land to limit the over-exploitation for various purposes, both urban and agricultural. Also, the involvement and participation of people and farmers are important for efforts to reverse or halt land degradation to succeed. Using the people's entrepreneurial nature to help in the recovery process is an important aspect of this solution.

The Atmosphere

Greenhouse gases have rapidly increased in the atmosphere since the industrial revolution. Nevertheless, the sudden appearance of the ozone hole in our atmosphere caught the scientific community by complete surprise. On a spatial scale, ozone depletion is not limited to polar regions but has been observed in a number of places, including New Zealand. Meanwhile, surface ozone has increased very much during this century (Northern Hemisphere), most likely due to anthropogenic activities.

This increase in the ozone can lead to various health problems as well as lead to negative impacts on the environment. The ozone does not lead entirely to negative aspects; in fact, one positive role of ozone and higher UV-B is that it acts as a disinfectant and keeps the atmosphere "clean." Aerosols and various particulate pollutants are also important in impacting the chemistry of atmosphere and the global climate. Very significant increases in aerosol production have taken place during this century – resulting in part in higher temperatures.

The complexity in interactions between atmosphere and biosphere are not fully understood. These processes are, in turn, used in negotiations and MEAs not fully appreciating the uncertainties and knowledge gaps. In the case of CFCs, the scientific community has been successful in catching the attention of policy makers, leading to substantial progress. Therefore, scientists need a greater voice in the climate change debate. One example of this is the scientific recommendation for the need to substantially put more

attention to the tropical and subtropical regions when investigating global climate change. This would require substantial capacity building in these regions, to be followed by extensive monitoring.

Conclusions and Recommendations

Perspectives for Policy-Makers

In general, there is a need for comprehensive holistic approaches to looking at and coming up with solutions for environmental problems. The holism is to encompass not only environmental process and ecological compartments but also effectively engage the complete set of stakeholders in discussion and action. There is also a need for linking national policy development to international concerns and policies. These approaches should be such that the pace of action on these issues can be further expedited beyond the relatively slow progress so far. It is also equally important to focus the efforts to reverse detrimental trends on well-defined geographical regions that are worst impacted. In practice, high-priority geographical regions should be identified for each environmental issue.

The United Nations, being the most significant intergovernmental and international institution in the world, is strategically placed at the moment to play a very strong coordinating role in dealing with environmental issues. By its intrinsic nature, it can undertake discussion on “hot” issues, which cannot be discussed at other forums. This is particularly true for the UNU within the UN. The UN can also play a major role in assisting management of transboundary natural resources. However, to achieve this there is a need to substantially streamline the capacity of the UN system to handle environmental issues. This conference strongly recommends the formation of an **Environmental Security Forum** to achieve integration of UN system-wide processes. Such a forum can bring together a broad range of international stakeholders, again paving the way for holism. It would also be important for such a forum to have some authority to evaluate the actions taken within the UN and its specialized agencies as well as those beyond.

The UN is also in a key position to undertake human and institutional capacity building in developing countries. This is an important aspect for successful implementation of policies and environmental agreements as well as sustainable use of energy and natural resources. Equally important is the process of educating policy makers on environmental issues. It has become increasingly obvious that developing countries often lack sufficiently trained professionals who can develop coherent and consistent national environmental policies. This, in turn, leads to confusion at the international negotiating table. The UN can undertake this task of multidisciplinary training in partnership with the scientific and academic community.

Policy makers should understand and provide proper focus to the existing and projected high stress on a number of natural and energy resources, in-

cluding water, food, land and biodiversity. Intergenerational equity should be highlighted for sustainable utilization of these dwindling resources. This information can be very helpful in galvanizing action in the general public. Policy makers need to give due consideration to the notion of subsidiarity in decision-making and broader participation at a more grassroots level. This obviously has important implications for the “think global, act local” paradigm, because often the thinking does not go beyond local considerations. Incentives for and information to the general public should be developed to encourage sustainable lifestyles and a higher level of participation in the decision-making process. As an example, the micro-level policies for food security should be pursued further in this and other sectors. Lastly, the policy makers should be cognizant of the uncertainties in scientific prediction and knowledge gaps when considering longer term policies. Risk assessment and scenario development can play an important role in reducing the impacts of existing uncertainty.

Rapid globalization has highlighted the need for effectively engaging the private sector in the decision-making and implementation process. The private sector can often serve as the medium for bringing about sustainable development, while providing the human and financial resources that the UN and international agencies are often short of.

Approaches for the Scientific and Academic Community

The scientific and academic community should also adopt integrated and multidisciplinary approaches to environmental issues. Such holism would lead to effective investigation of the scientific linkages between various environmental regimes. The complexity of the problems often demands this holistic approach in research and investigation to arrive at coherent and effective outcomes.

This conference emphasizes the need for education of policy makers and the general public on environmental issues. An effective way of achieving this is through increased interaction between these sectors and a greater sharing of information with the civil society. The scientific community in particular needs to gear its output as a product targeted at and understandable to the general public. Scientific understanding behind popular environmental concepts, such as the precautionary principle, should be better explained to a general audience. On the whole, a greater transparency in scientific research and its results is essential to building the trust of general public.

The conference also highlights several areas as preferable targets for further development of information, knowledge and technology. Foremost among these areas is that of interactions between processes at micro- and macro-levels. The existing state of knowledge on these interactions is insufficient, and the scientific community is urged to step in to fill the gap. Several sectors have urgent needs for technological advances and innovations. These include water utilization and reuse. More specifically, a completely

new, integrated paradigm for water management needs to be developed which will look closely at water utilization patterns, water costing, water reuse and other issues. Similarly, stresses on food production and security highlight the need for rapid development of technologies where maximized benefits can be obtained from shrinking per capita land and water resources. In this respect, the capacity of marine food resources should also be fully evaluated and examined. The energy sector also demands the attention of the scientific community in terms of development of innovative renewable resources.

The scientific community should focus its efforts on optimization in resource utilization and waste minimization to match sustainable lifestyles. This is important if population growth and the urban boom are to be effectively dealt with. There is also a need for a balanced discussion on global biodiversity, biosafety and biotechnology issues. Such a discussion should give careful attention to the positive aspects of genetic modifications while also considering the potential adverse impacts on the environment.

A Message for Civil Society and General Public

Despite a variety of doomsday predictions, the overall outlook for the future in the twenty-first century is positive and hopeful. Human ingenuity and technical advances are bound to come up with solutions to complex environment and sustainable development issues. Already, we can see beyond the horizon a number of renewable energy resources, technologies for ensuring food security and reversing land degradation, and management practices for sustainable and efficient use of water resources. Nevertheless, the general public, mass media and civil society at large needs to be fully aware of the extent of threats to our natural resources and the long-term consequences for their depletion.

Information dissemination and capacity building of the general public are critical to human development, while at the same time being essential for environmental protection. This conference puts forth the notion of a **Virtual School** to achieve this objective, where latest advances in the communication frontier and the Internet can be exploited. With decreasing costs and widespread use, these media can be relied on to prepare and disseminate more localized information to end users.

It is important for the general public to understand that most existing urban lifestyles need to be reviewed and revised to ensure long-term sustainability. This will need involvement of all sectors of society and an integrated approach towards consumption of resources and waste generation.

It also needs to be emphasized that threats to the planet's biodiversity resources are to be taken very seriously. Indeed, destruction of biodiversity and extinction of species is an irreversible process. Therefore, it may be prudent to adopt biocentric and ecocentric approaches to discussing biodiversity conservation issues. Action and participation by the public on this and other environmental issues is essential to reversing the negative trends.

Part II

Policy Reflections

Development and Governance

Yoginder K. Alagh

Introduction

To explore the challenges of development and governance in the next millennium is a formidable – if not impossible – task. It is therefore good to ask a village boy like me – more accurately, a citizen of a town in western India, who occasionally goes to Delhi – to “solve” today’s problems, to invent the next century. Ahmedabad, from where I come, is a town of merchants – “*Jagat Sheths*,” we call them, or “Global Merchant Kings”. The town has the distinction of having invented the first global money, many centuries ago, to trade with the Italian City States of Verona and Venice. The town was never put to the sword and fire, since it financed both invader and defender.

I thought that after working on the original team of the world’s first global agricultural model, *Agriculture Towards 2000* and as Senior Adviser to the Secretary-General of UNCED, I had done my best. But there is nothing like the inheritance of the Indian freedom movement, an econometric training from Lawrence R. Klein and that magic called “national experience,” to encourage me to attempt this impossible task, which is “organized dreaming.”

To make life livable, apart from some “dreaming” we will:

- identify the main problems of a local nature, which have important global dimensions, isolate successes and failures, and address the issues of faster replicability of successes and systems to avoid failures;
- argue for the establishment of organizations and institutions, rule-based systems of incentives for replicability, and disincentives for perverse behaviour;

- argue for local and global action for help to those who help themselves;
- emphasize from available experience the urgent need to make a beginning and to improve systems based on ongoing experience; and
- demonstrate the need for organizational innovation – for example, the need to encourage limited and focused co-operative and community institutions with the vigour of decentralized markets.

Regarding our objectives, at the fundamental level, they will be food, health and leisure. If we handle ourselves wisely, the problem of hunger should not spill beyond the first quarter century. Therefore, food will become a part of nutrition or health, and taste or leisure problematiques. The real question, then, will be: Will every one of the planet earth's inhabitants be able to lead the life they want to with the resources they have? But this is so wide that one cannot spell it out.

In fact, there is a deeper reason that one should not spell it out. For governance in this context, with modern technology at its beck and call, should mean organizations and rules, such that individuals and communities can strike out and experiment in the most unimaginable ways. I travel a lot in rural India, and some weeks ago I went to the Centre for Research in Dryland Areas (CRIDA). With biotechnology, they are a very confident lot. They showed me a hill with fragile soil where only low-yielding cereals were grown earlier, but now it was spices and leaves. Even a meat eater like me was taught by my grandma about the hundreds of spices and leaves that make Asian food the pleasure it is. But thanks to biotechnology, the smells and scents of this hill were truly mind-boggling. And that is going to be the nature of the human experience in the next century. So it is truly unimaginable and you cannot and should not describe it.

We are beginning to see the beginning. But if we cannot describe it, we are like the early econometrician masters who discovered that a large model of linear relations could lead to a situation in which a functioning economy may not emerge. In fact, you need non-linearities to close this indeterminate world. This will be the task of governance – to spell out those rules which determine what we should not do. Punishment for doing what should not be done will have to be severe. Also needed will be rules and organizations that will give incentives for widening the human experience. This is so since, in spite of all the counterfactuals and the great power of modern technology harnessed with decentralized markets, obscurantism, avarice and mindless violence are still a large part of human existence in the global village. Governance will therefore mean the establishment of these borders – the limits, as it were – and the escalators, and the more difficult task of showing how they can function. No one can expect the entire century to be charted, but if infantile optimism is to be avoided, the first steps, at least, have to be firm and clear.

We will only explore three critical areas for take-off. First, how can communities and individuals in fragile at-risk regions turn around? In other words, how can sustainable development strategies be operationalized. The governance question here is the socio-economic rules and incentives and

disincentives, so that organizations and structures are in position to foster replicability of success stories.

Second, what are the international implications of supporting these strategies? Here the knowledge base is thinner, but the timing is appropriate. The “Washington Consensus” is being challenged by the Comprehensive Development Framework and declarations on partnerships. Development strategies are, by definition, mobilizational in the sense of resource-raising. But do we have the wisdom to develop systems which that genuinely help those who help themselves, or will resource, technology and organizational support always, and only, be a part of commerce, the urge of dominance and double-speak? Here, even the blueprints are vague. At least the rules of structural adjustment were clear: abolish controls, reduce government, reduce tariffs and never have special policies for employment or development of backward areas. But now we don’t know. The power of modern technology and decentralized markets is known. But how to use this power for areas where markets and resource backups are weak is not quite clear.

Third, and finally, can partnerships be talked about if the language of the other is not known? What are the requirements of participation and transparency, and how can they be made a part of functioning systems?

Sustainable Livelihood for the Marginalized

Consistent agricultural growth over a period has led to a decline in rural poverty levels in the areas where such growth has taken place. The so-called Green Revolution areas are a case in point. Annual agricultural growth of 3.5 per cent or more for two decades or so invariably led to critical elimination of hunger and significant declines in poverty levels. But such growth took place in areas with good soils and assured rainfall or irrigation supplies. FAO studies showed that the elasticity of cropping intensively with regard to irrigation was around 0.3, and so assured water supply was land augmenting, while land productivity with regard to irrigation was above 0.5.

As Japanese economist Y. Hayami (1981) has shown, this growth raised the demand for labour; employment went up, and poverty levels declined. The model of atomistic peasant agriculture worked here. The benefits of state-supported research could reach the farmer, provided land rights were established. Input and output disposal markets worked in selected areas, since irrigation technology and market support were very much part of this strategy. Planning work in India (Alagh, 1982), for example, was centred around it. In the early eighties, the critics derided it favoured crops, or a favoured-region model. Another critic described the planning of this strategy as limited and linear thinking (Alagh, 1991, 1987).

The problem, however, was in areas where these initial favourable conditions did not exist. They were bypassed in the growth process. In India, in the first phase of the Green Revolution, in one-fifth of the districts growth was negative, and in another two-fifths it couldn’t keep up with population

growth levels. In Sahelian Africa, many countries in the rest of Africa, and some countries in Latin America, the situation was worse – and continued to remain so. The prime issue of governance is to reverse this process. With all the advances made in our understanding of the organization of agriculture, technology and resource management, the persistence of mass poverty and hunger stands in striking contrast to claims of universal progress.

An interesting aspect of these problems is their relationship with environmental problems. These are “fragile eco-regions” – they are the arid and semi-arid regions as described in the FAO-UNESCO agro-economic atlas of the world. They are hill slopes with declining tree cover, and soil erosion caused by rainfall. They are coastal areas where mangroves are disappearing. They are saline lands and problematic soils. These are areas in which, through time, communities had established a balance between carrying capacity and human need. There was poverty, but also time-honored practices of sustaining the fragile resource base with activities, technologies and customs that had evolved through centuries of experimentation and adaptation. In the last century, however, dramatic reductions in mortality and resource demands from outside have rudely shaken the carrying balance of such areas.

In the preparation for the Rio Conference, and particularly at the Hague Symposium and Declaration, some of us had argued that the problems of the global commons cannot be meaningfully negotiated without addressing this problem. Sea warming, global warming and biodiversity questions cannot be addressed through global negotiations if local communities are out of balance with their land and water resources. This was articulated in The Hague Declaration, of which I was a signatory and for which I had worked (Sustainable Development from Concept to Action, 1991). These same ideas were ultimately reflected in the Rio Declaration and Agenda 21.

Very little organized work is available on successful models under these conditions, however. In the late eighties, an attempt was made in India to build up a set of best practice cases that had worked. I summarized these in work done for starting an agro-climatic policy exercise by the Planning Commission and in a book written for WIDER. The cases had some common characteristics. The economic rates of return on investment were high – over 18 per cent. Substantial food and energy deficits were met in the rural communities studied. The technology consisted of land and water development followed by the introduction of “cropping” sequences. On hill slopes, it was watershed development, contour building, gully plugging, and working along ridges. In coastal areas, it was water management. In saline waterlogged soils, soil amendments and drainage were undertaken. Vegetation cover was also a part of the strategy: appropriate tree cover for consolidating the soil and either tree crops or the “recommended” crops followed the land and water development strategy. Generally, a low-yielding cereal was replaced by a two-crop sequence or tree cover, both of which helped to consolidate the soil further.

From the viewpoint of replicability, there were some interesting features.

Leadership at the community level was important in all these cases. And, generally the leadership group had some science background. The leaders were from NGOs or social work organizations, retired army personnel, civil servants and, in one case, a farmer. The technology for the land and water development part was generally available in the institutions in the region, although some adaptations were made locally (for example, in the saline water-logged soil reclamation project). In each of the cases, the major work was done at the community level. Individual landholders had to cooperate for well-defined purposes. In fragile agro-ecological regimes, limited cooperation is a precondition for land and water development strategies to succeed. If one farmer stays out, the contour bunds of the others will be washed out in the next monsoon. The atomistic model alone cannot work here.

The economics of these efforts led to some interesting questions. While these projects had high internal rates of returns on the investments made, they ran financial losses. Generally, markets were weak in fragile regions, and output prices were lower than border prices while input prices (like soil amendments or water pumps) were higher. Also, in the initial phases, land productivity levels were lower and improved as the effort proceeded with the organic composition of the soil. Sometimes low-value productivity crops are needed to improve soil composition. While generating employment or improving access to food and energy, such activities need initial subsidies. Ignacy Sachs, in his summary paper for the Hague Conference, suggested that these be funded as “up-front costs.” In this paper, prepared for the Rio Conference and extensively reprinted, Sachs asks for “a welcome shift from crop-oriented policies to production system-oriented ones, with special emphasis for the needs of small farmers.” Sachs pointed out that:

“Alagh (1991) gives many examples of watershed development projects with a short payback period. The techniques for such projects are well known and their impact at the level of the community would be very favourable. Yet they need public funding for the up-front costs. Alagh argues in favour of agro-climatic planning in terms of alternative agricultural and farming systems in order to overcome the shortcomings of a favoured crop-region approach” (1991).

This was integrated in Agenda 21 and the Rio Conference. The effort by community level agencies is now such that, in countries like India, the approach is no longer at a pilot level, but is the beginning of a movement. The literature on the case studies I had initiated has been flatteringly duplicated and, recently, a table I had presented of eight cases has been replicated over fifty times. More important, the largest NGO in the land and water field supported by the EC, and another a group supported by a German programme, had put under tree cover 124,316 acres, as verified by independent evaluations. This is just a little less than the tree cover cost in India in the years 1990–95. The EC-supported group, the advisory committee of which I chair, has recently completed a training programme for Sahelian tribal leaders supported by the Norwegian Agency for Development Cooperation and the Agha Khan Foundation.

The requirements, however, are not in hundreds of thousands of acres, but millions of hectares. Government support for such programmes in India has just about kept constant, while international support has gone down. This was a period of “economic reform.” Why do we find it difficult to help those who help themselves, even in the core areas of local and global concern? As preparations for the Kyoto meetings showed, in relation to the Rio targets, we are well behind in the interrelated areas of land, water and energy.

National and Global Rules

The problem of imposing a hard budget constraint at the local level, and helping those who help themselves, is a difficult one to address. Another way of setting the problem is to harness the great vitality of decentralized markets in replicating widespread rural growth, with institutions and organizations that foster limited and well-focused areas of community and cooperative action. In fact, in the current phase, even if you think of the problem seriously, you risk being called a luddite.

When I was India’s Energy Minister, forward-looking local leaders had introduced schemes by which if a village or industrial estate promised to pay the price of electricity, facilities would be provided to them on an urgent basis. I asked that national and international loan money be accessed for such areas, since they had met the preconditions of “reform.” But I was told I was “islanding” reform. In spite of the professional literature on “Alagh’s insidious islanding proposals,” I would suggest that islanding is a desirable feature, because if a community is willing to pay the price of reform, it should not be asked to wait for the reform as designed by a global or national institution for the system as a whole.

Interestingly, there is a lot of literature by political scientists which shows that the mass of people in poor countries was not interested in the Washington Consensus-kind of economic reform. Many of these studies have a very incomplete understanding of reform processes in poor countries. Islanding would mean that we would relate reform to *communities* and also force ourselves to work out the implications for higher order systems of such issues. This is important because Comprehensive Development should not mean setting the reform objectives from the metropolis, and bringing in safety networks later, but a genuine attempt at participative growth. For developing the structure or incentive and disincentive systems for this kind of growth, we can begin with a taxonomy of the complementarities of policy rules at different levels of policy-making, such as no level can spend more resources than they have access to. But resources that are in short supply or binding constraints at national or global levels are elastic at local levels. However, their mobilisation requires policy changes at higher levels. For example, it is easy to buy a tax-free bond of New York civic bodies, but very

little attention has been paid to markets for municipal paper in developing countries and the fiscal reform that has to precede them.

These problems are complex, but it is not that modern information and knowledge systems are incompatible with them. Major think tanks working on the character of the Neo-Fordist technological revolution, like the FAST Group of the EU, the flexible industrial specialization networks and others have emphasized that it is strongly compatible with networking and decentralization. As the Science and Technology Minister of India, I had convened for UNESCO a Prepcom meeting at Bangalore for the World Science Conference at Budapest which strongly reiterated that the spread of technology is an institutional and not just a technology issue.

Serious research during the last decade-and-a-half has shown fairly conclusively that the tremendous opportunities which are available with the new technology requires groups and systems that can manage its interdisciplinary nature, since applications cut across areas like biotechnology, communications and computerization. If the preconditions are available, it spreads very fast, both through space and sectors of the economy and society. But if the infrastructure, both physical and human, is not available, vast areas will be left out, including some in the developed world. There is also the need for quick response. As Ricardo Petrella of the EU's FAST Group pointed out, each generation of innovations is building on the corpses of earlier ones. State and parastatal agencies find it difficult to perform in this framework. Small flexible groups responding to need work. Again, the need for partnerships, of community initiatives to back those who work, is obvious.

The Inter-Parliamentary Union (IPU) at its last meeting in Berlin, resolved in the discussion of the New Economic and Financial Order that the United Nations and Bretton Woods Institutions should monitor the implementation of the recommendations of the Budapest Conference. On issues of a scientific nature, the Conference was worried about political and narrow profitability considerations dominating decisions and wanted the scientific community in charge. As the Rapporteur of that Group and as a Chairman of one of the Scientific Steering Committees of UNESCO represented at Budapest, I would suggest that this proposal, which was strongly supported by Japan, should get very serious consideration. The IPU also suggested that the World Bank should hold discussions with parliamentary groups on the Comprehensive Development Framework, a proposal that the Bank's Senior Vice President in charge of Policy, present there, supported. The UNU and UN agencies should play an important role in these emerging concrete attempts at networking and transparency.

Much the same kind of approaches are necessary in diverse fields like education, health, urban problems, and even the debate on industrial restructuring policies. The question of synchronizing and phasing reform has again gathered urgency after the East Asian meltdown as the recent work of experts like J. Stiglitz and R. Recupero has shown, but this debate was there

all along. Ten years ago, in a WIDER monograph, I had shown that in a partially liberalizing economy efficient firms can start making losses, because the industries supplying inputs to them get more effective protection. This was the analytical base of the level playing field argument of synchronizing reform in interconnected industries and phasing it to avoid negative protection of efficient producers. Lance Taylor, in his “Rocky Road to Reform,” described this as a Phased Pricing Strategy. Similar approaches are now again being suggested for the transition to sustainable development based on market principles in sectors like energy and material based industries, which have important environmental consequences (Alagh, 1991).

A basic issue that has to be accepted in this century is that, in spite of great progress, the lifestyle of the rich is simply not feasible for the world as a whole. Now that China and India are growing faster, this question – which was raised at the Hague meeting by Gammini Correa – cannot be avoided for long.

Vision and Language

There can be no question of history coming to an end, when countries like China, India and the Third World have again started knocking at the doors of destiny. As I said at the beginning, we simply cannot outline what communities and societies will do with their freedom – social, political and economic – as this century progresses. We can, however, speculate on the broad nature of organizations and structures, which will make this possible. This is the approach we have followed, with an attempt to nudge the first steps with urgency.

The word “cooperation,” as a political scientist of the new emerging systems has argued, appears very often now. There are cooperative political arrangements at different levels of Government, cooperation with non-governmental agencies, cooperative companies and cooperative arrangements with companies. Ismail Seragaldin has argued that developing countries will have to enter into contract arrangements for health and agriculture with the big genome companies emerging in the private sector at the beginning of the century.

As a reaction to the simple rules of structural adjustment, it is argued as a background to the Comprehensive Development Framework that the development problem is very complex. To an extent this is true, but it should not deter us from setting up incentive and disincentive systems for broad-based development. The goals of the century require that we start now.

At the end of the twenty-first century, I would like to find another economist coming from Ahmedabad to Tokyo and saying that by 2010 the problem of hunger in large countries like India, which have a track record of agricultural growth, was solved for that 8 per cent of the population which went to bed without two square meals a day in 2000. And that in other countries, which had more severe problems, it was solved by 2020. That the

problem of poverty which was more general was, to a great extent, resolved by 2040, when the population of the world had also stabilized with both the Chinese and the Indian populations below 1.4 billion each.

I hope this economist would say that when, in the first quarter of the century, in addition to the energy consumption of the developed world, China and India were each burning almost half-a-billion tonnes of coal, efficient coal burning was the order of the day. That the emphasis was on renewable resources, and hydro and nuclear power were being used, but the global compacts on cutting down energy and material-intensive lifestyles had started functioning – particularly for urban transport.

Our future economist might say that the beginning of the century saw the first major, serious effort at land and water development and conservation, and he/she would report on the experiments by communities with land, air and water in this decade. That earlier ideologically determined rules of development had given way to a Comprehensive Development Framework, which was tentative and grappling at the beginning, but that the rules of an implementable framework in which the global community and nation-states would help any community that wanted to help itself in resolving problems of welfare and resources had been established. She or he would show how these systems were simplified and improved with experience, beginning with simple issues like legal access to resource pools and powers of action, and getting into more efficient systems of knowledge-based socio-economic system designs.

She or he would show that, as these communities strengthened themselves, they found it possible to take on those who would obstruct, exercise power on the basis of exclusiveness and garner short-term gain at the expense of the global future, with fair means or foul. She or he would show that a strategy of surrounding the areas of privilege with islands of enlightened forces of self- and community-interest worked, and how the struggles continued in the rest of the century.

She or he also would show how systems were developed such that scientific issues like bio-safety were largely left to scientists, technology access was separated from political issues and the urge to dominate, and private and public infrastructures were created so that those who had the capability would integrate with the great and rapid advances of the period.

Finally, it is not possible to speculate how the homo sapiens will use this great freedom. It is simply mind boggling to visualize the possibilities. To end with the last line of a poem by Tagore, “Into that land of freedom, oh my father, let my country awake.”

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Education for Tomorrow

Ahmadou L. Ndiaye

In organizing this conference, the Council of the United Nations University fulfilled its mission as defined in the Charter under which it was created: “The creation of a new type of university which will promote on an international scale cooperation between researchers engaged in multidisciplinary studies on pressing world problems and reinforce activities of research and formation in developing countries.”

We may dare say that this conference, organized in a context well-defined by terms of reference, invites us to initiate trends and policies that will characterize the evolution of the sectors mentioned, with the aim on one hand of defining as clear a vision as possible of this evolution and, on the other hand, above all, of identifying the means to be deployed in order to attain our goals.

It is in this context that I have the mission to talk to you about a sector in which I have been involved for more than thirty years of my professional life: education. This is a formidable task, by reason of its impact on all of society and also by reason of its impact on the listeners. In confronting this difficult situation – and, as it is proper to do in such circumstances – I am going to refer to my elders and find refuge in the words of Professor Joseph Ki Zerbo. In briefing me during the course of one of our numerous conferences on reforms in education, he said: “We have produced Himalayas of resolutions and rivers of rhetoric; but what we actually need is to implement concrete action.”

In a document prepared by UNESCO in December 1997, as a contribution to a work programme on education, the raising of public awareness and the formation of the United Nations Commission for Lasting Development, it is written: “Education is the most efficient means at society’s disposal to

face the challenges of the future. Education will shape the world of tomorrow. Progress is becoming all the more tributary to the faculties of educated minds, the faculties of research, invention, innovation and adaptation.”

I would stress that it is not necessary to believe that education means only instruction or a formal education. Also, in order to avoid all ambiguity and, above all, to situate ourselves in the spirit of this conference in regard to the challenges of the new millennium, we shall talk for the twenty-first century, of a system of “education and formation” instead of the classical concept of education.

Ideas are the elements that shape and change the world.

UNESCO, after conducting numerous meetings on the problems of education (one of the fields in which it is qualified), organized at the end of the century two world conferences of great significance: one in October 1998 on higher education (Vision and Action) and the other in July 1999 on Science for a New Commitment. Each conference was the subject of meticulous preparation, and each world region was given the opportunity to voice its particular problems and to present intended solutions. What was remarkable in both of these conferences is that the vast communities gathered agreed on a common programme. Each conference was concluded by:

- a declaration analysing the situation and giving a vision;
- a priority plan of action inviting mobilization around what is to be done to prepare intellectually and humanly for the changes of the twenty-first century; and
- setting up of a follow-through committee.

The fact that everything has been said may ease our task, but it also may complicate the task due to the need for repeating or reminding people of some of the ideas that will shape and change the system of education and formation.

Let us start with the demand to which the system will have to answer, and then bring in the elements of the response.

The Demand for Education and Formation

Numerous studies have been performed on the different aspects of this demand as it will present itself in the years to come. I do not foresee any fundamental modifications in trends in the near future.

This demand implies a quantitative aspect that is tied to many other well-known factors:

- *The demography*: Here we find the dichotomy that, in certain domains, divides the world in two. In the developed countries, demographic growth is worrisome because of its weakness. The developing countries, meanwhile, are confronted with demographic growth that exceeds the rate of increase of the GNP, thereby accelerating the progression of poverty. For the developed countries, the aging population is predominant, while in the developing countries youth counts for the majority of the population.

In both cases, we are witnessing an important increase of the population that calls for ready access to education and formation.

- *Catching up:* The qualitative growth of the demand is also related to the need for organizing a way to catch up with access: girls in relation to boys, the countryside in relation to the cities, and developing countries in relation to developed ones. On top of this, we have also on one hand the increased efficiency of the lower formations that exert a stronger pressure on higher formations and, on the other hand, a greater need for education as we get older.

Thus results a greater demand by those desiring access to education and formation. This demand also possesses a qualitative character of which we will retain, mainly:

- *The diversity of structures:* There is primarily the dichotomy between the formal system, a matter of the preoccupation of the governing bodies, and the informal system, which is of more importance because of its exclusion from the formal system. There are also, in both of these systems, different levels that apply to the individual from kindergarten age until the post-doctorate period, passing through elementary, secondary and higher education (to mention only the formal system). Inside certain of these different levels, there are general, technical and professional formations, coming most often with watertight walls.
- *The diversity and the variability of profiles:* In the developed as well as in the developing countries, the educational system is in crisis. Among the reasons for this crisis, we find everywhere the maladjustment of production in relation to the needs of the market. This factor, coupled with the employment crisis, is the source of confusion among our young people, who seriously doubt that their diplomas will secure them employment. Consequently we witness a double variation of demand in relation to the needs of the market and those asking for a formation.

Another element that demands our attention in this diversity of qualitative needs is tied to the progress of science and technology: namely the appearance of new computer and telecommunication technologies as well as biotechnologies, which bring simultaneously great perspectives and realizations and great problems to the whole of the human race. To those new techniques we may add the increased importance of social sciences. Those new disciplines supplement the old ones. "To teach is to repeat," but "To teach is also to choose"; more and more, the answer to that diversity will be decisive in the elaboration of curriculum, programmes and learning tools.

Responses to the Demand

What are the elements of the responses to this demand? Tomorrow's system of formation and education shall be shaped by the responses given to this demand of which the tendencies of aspects and the evolution are under-

stood. As a matter of course, the more the demand is understood, the more relevant the responses shall be.

This is not to say that said demand is fixed. As we put forward responses, we must continue our surveillance of the evolution of demand and attempt to constantly adapt the responses. Nothing should be taken for granted, because we are dealing with a dynamic system. However, the basic elements on which this system shall be established already exist, and their common denominators are relevancy and quality.

These five basic elements are:

The Democratization of Access

The actual demands of democracy and respect of human rights lead naturally to the present classic school, a system of education and formation which, on the national level, will be democratic and popular; namely, one that will integrate the actual structure of the formal and informal systems with a privileged position granted to permanent education. This must, in the course of one's life, permit continual access to the speedily increasing evolution of knowledge. This important aspect of democratization must offer to individuals the possibility of social promotion conforming to their aspirations, efforts and merits.

Another demand that will shape the system is the integration and development of access of those who are suffering from physical and intellectual handicaps, or from maladjustment to school and society – most of whom are being widely excluded from current systems. This gap is also a factor of democratization, in eliminating exclusion.

Finally, in its function, the system must constantly respond to the need for a linkage between theory and practice, teaching leading to productivity, and associating study with productive work, thus making education and formation an efficient tool towards national development. This form of liberation, which we may consider a step against alienation, may equally be a factor towards democratization.

In its constant search for relevancy and quality, the system of education and formation must integrate coherently on the whole the needs of society and the aspirations of its various components.

Regionalization of the Structures

It is currently accepted that our world is a planetary township. In all parts of the world, regional groupings have formed themselves, leading inevitably to the forsaking of certain attributes of sovereignty and also to more sharing. The educational system cannot escape this evolution; but here, more than anywhere else, the vision of Leopold Sedar Senghor must be brought in: "At the national level we have to root ourselves in our own values and open ourselves to positive external influences." We have to assume, at the same time, the interdependence that unites us and the diversity that enriches us,

finding new ways to combine everything in harmony. That will lead to the regionalization of certain elements of the system of education and formation.

Regionalization, which rests on the common use of means between the structures of different countries, has already started to be applied efficiently in higher level specialized formations. We are talking in particular of those which must combine teaching and research, and which require resources not always reasonably possible to mobilize in or by only one country.

The regionalization that functions on the base of academic mobility translates itself into a solidarity between North and South, initiating and developing South-South relations. This is also an efficient way to fight against the brain drain suffered by some countries; in the end, this drain may be transformed into a source of gain for the countries that are victimized, for these external human resources will, if not by returning to their countries of origin, at least participate in formations on the spot.

Regionalization also offers an ideal environment for utilizing what we may call "volunteers for the university." These would be recently retired university academics, or young ones starting their careers who desire to temporarily work outside their own countries. The regionalization in question is prefigured by the United Nations University, with its light central structure of consultation, coordination and administration, and with its external centers creating a real partnership resting on sharing, solidarity, equality and mutual interest. It thus can work on subjects of regional and world bearing with a mechanism to ensure a large diffusion of the results.

This efficient contribution on the regional scale in the formation and reinforcement of capacities in human resources is put forward by UNESCO with UNITWIN; L'Agence Universitaire de la Francophonie with its institutional networks, thematic networks and doctorate schools; and The Association of African Universities, the National Universities with centres of excellence. It is a certainty that the movement will amplify and reinforce itself in the future in order to constitute the foundation for the mobilization of citizens engaged in the implementation of the changes that are outlining themselves.

Partnership between Actors

The education and formation system is composed of actors and partners who must share vision and action. That takes us back again to this need of the twenty-first century: democratic dialogue. The actors of the system, who comport themselves as professionals and are immersed in daily action, are often victims of, in the words of the philosopher, "what is difficult is to see one's own glasses."

Thus, they must have dialogues among themselves; but also, more importantly, they have to be open towards the outside in order to be inspired by the necessary innovations that may not be evident within themselves. Dialogue inside the system concerns the actors who are forming, those who are being formed and the administrative staff.

This community must, in its turn, open itself to other partners who are in governments, organizations of civilian society (political parties and syndicates), enterprises, organizations of enterprises, partners in development, regional and international organizations and non-governmental organizations. It is in the framework of partnership that strategic planning has been conceived. This is meant to become a modern tool within the education and formation system.

It is aimed at defining and explaining, in a pragmatic and accessible way, the missions, aims and objectives in each structure while also indicating the strategies and means necessary to attain them. The vast amount of consultation that guides this elaboration allows all partners to bring their contributions and, thus, be concerned with its actualization to engage themselves resolutely.

Strategic planning allows and eases the execution of another demand that must be one of the components of the system: evaluation. It must have two elements: internal evaluation or self-evaluation, which must be constant, and evaluation by independent and qualified experts, which permits each structure to periodically situate itself on a national and international scale of values where quality and relevance are the constant values of reference.

Financing

Actually, in both developed and developing countries, another important cause of the crisis is connected to the means. Experience and the facts have also shown us that when we talk of the means of education, we tend to focus too much on the financial means. While these are certainly important, they are not the only ones that need to be taken into consideration. The functioning of the system requires financial resources but also human and material ones, which brings another major concern: good and rational management.

Strategic planning, which must not be seen as a panacea, can also help enable better management in a significant way. Concerning the financial resources, which remain the centre of the strife, everyone will agree to recognize and acknowledge the major responsibility of the state in financing education and formation. We have to come to accept as well that the state, even in developing countries, invests a generally huge amount towards the financing of education.

We must finally admit that in this field as well as in others, the state cannot do everything. Beside those coming from the state, the national financial resources destined for the educational system must be of private as well as of public origin. Society in all its components must participate in the financing of the system, which is its own, by which it is served and in which it is involved in strategic planning. This partnership, which leads to the common vision of shared interests, is a solid foundation in building the changes.

This partnership, at the national level between the concerned parties, in spreading itself to intergovernmental organizations, partners in develop-

ment and nongovernmental organizations, must be able to mobilize additional resources. It is always in the framework of the search for significant and constant financing of the education and formation system that it is proper to remind ourselves of the need to deepen the idea launched at the World Conference on Science, which suggested: "The establishment of an appropriate mechanism allowing the developing countries, namely Africa, in the course of the on-going process of the lightening of their national debt, to dispose of sufficient financial resources to reinforce national and regional systems."

New Technologies of Information and Communication (NTIC)

It is clear that the means which will give a new face to the education and formation system, consistent with the expectations of the new millennium, are the ones drawn from the NTIC. Computerization must be perceived and understood as a universal language of the 21st century.

Considered as a medium, its introduction in the education and formation system should be done at the earliest time, and its utilization should lead towards generalization. The revolution thus initiated will cause a disruption even up to the conception and realization of classrooms! The utilization of this new language will also revolutionize the transmission of knowledge and will give a universal character to the access to education and formation. This new medium will enlarge the access to knowledge and will methodically insure the efficiency of education through the course of one's lifetime everywhere in the world.

However, those new methods present certain new demands, and the first to master them will be the first to reap their benefits. In this matter, we must first acquire this equipment in order to introduce these new methods in the education and formation system. We must also form those who will form others in the use of the new techniques, not only that they may master their utilization, but also and above all that they may be able to elaborate the materials and the necessary educational supports.

Instructors remain, more than ever, necessary in this new process of apprenticeship; the new technologies, far from threatening to replace them, are assigning them new missions. It is thus always essential to aim at relevance and quality, because any deviation will have results even more devastating than in the actual system, by reason of the power and widespread capacities of the diffusion of these new tools.

Finally these new tools will revolutionize completely the means of scientific documentation and diffusion. The NTIC will lead to prodigious development of education and formation, which will no longer recognize the limits and constraints of classrooms, distances, time zones or fixed school terms. So, progressively and inexorably, a virtual system of which the framework is outlining itself in front of our own eyes shall replace the one we have all known. Education will shape the world of tomorrow, for it is the foundation for development. Education requires heavy investment, the re-

sults of which will appear only in the long term – not in the form of output, but by the changes incurred.

We are witnesses to the premises of these changes, but we will not be there to measure the distance covered or to compare the two systems. We must nevertheless work at initiating these changes as if we were ourselves eternal, for it is the education and formation system that shall shape the world of tomorrow.

The Environment in the Century Ahead: Ever-Greater Problems or Ever-Wider Opportunities?

Norman Myers

Introduction

As we stand on the cusp of a new millennium, humankind faces challenges of unprecedented scope, especially environmental challenges. We are more critically dependent than ever on the environmental resource base – energy, water, topsoil, vegetation, biodiversity, climate, etc. – that ultimately underpins all human activities. Yet we are depleting and degrading our environmental resources at rates far surpassing any of the past, and to an extent that is leaving a severely impoverished planet.

Coupled with this regrettable insight is a positive insight: that our environmental underpinnings are far more valuable in strictly economic terms than we had ever supposed. Because most environmental goods and services are not traded in the marketplace and hence have no price evaluations, they have been treated as not only “price-less” but “worth-less.” For this reason, they have been mis-used and over-used as if with impunity. Fortunately, we now have a surrogate evaluation of all environmental goods and services: \$33 trillion worldwide per year (1997), and thus larger than the global economy of \$29 trillion (Costanza et al., 1997). In short, global natural product is more valuable than global national product. Now that we have a firm grasp of the economic value of our environmental supports, they are more likely to receive proper care.

There is still better news. The clearer understanding of the vital role played by our environments means we may learn to benefit from them in myriad ways that enhance our welfare. Thus we can embark on a shift from an approach that has over-exploited and under-utilized our environments, to a strategy that derives full and sustainable benefit from them. In this

sense, we can look forward to a century ahead that is marked by an ecology and an economy of hope without precedent. Are we not a superbly privileged generation to be poised at what may eventually be viewed as the greatest watershed in the human enterprise since we came out of our caves ten millennia ago?

Background

There is much evidence (Cohen, 1995; Meadows et al., 1992; Pimentel et al., 1994) that the Earth's carrying capacity is already exceeded by the present six billion people and their lifestyles. Humans now account for 55 per cent of all available water runoff, and they co-opt almost 50 per cent of all plant growth. Greater amounts of nitrogen and phosphorus are mobilized by humans in the form of crop fertilizer than are mobilized by natural processes. Similarly, humans already harvest an amount of ocean fish that reflects fully one-third of phytoplankton productivity in temperate continental shelves (Pauly and Christensen, 1995). The bodies of many people contain measurable amounts of at least 500 industrial chemicals that have been released into the environment after only marginal testing to determine their impacts on human physiology. What will happen when there are two billion more people in the world, as is projected for only 25 years hence, let alone a further one billion by 2050? Can the biosphere and its inhabitants, both human and non-human, sustain such unprecedented and fast-expanding pressures?

Of course, many of these pressures reflect the lifestyles of a minority of humankind, viz. the industrialized nations, being those people who engage in disproportionate levels of resource consumption. Equally to the point, present consumption in developing nations is meagre indeed, and deserves to be increased steeply and swiftly, especially as concerns those three billion people (almost two-thirds of the developing nations' total) who account for only five per cent of the global economy.

Equally to the point, today's disadvantaged people cannot count on ever achieving the sort of affluence exemplified by "the American dream," if only because of the sheer numbers of consumers both actual and potential. For an illustrative example, note the case of China with its 1.2 billion people today, and 1.6 billion projected for 2050:

- If each of China's 1.2 billion people were to consume one extra chicken per year, and if that chicken were to be raised primarily on grain, this would account for as much grain as all the grain exports of Canada, the second-largest exporter.
- If per-capita consumption of beef, currently only 4 kg per year, were to match the 45 kg of the US, and if the additional beef were produced mainly in feedlots, this would take grain equivalent to the entire US harvest, less than one-third of which is exported.
- If China were to consume seafood at Japan's per capita rate, it would need 100 million tonnes, more than today's total catch.

- If China were to match the US for per capita car ownership and oil consumption, it would need more than today's global output of oil, and its cars would emit roughly as much CO₂ as from all the world's transportation today.
- If the Chinese were to consume wood products at the Japanese rate, their demand would exceed Japan's nine times over.
- China's economic growth rate has long averaged around 10 per cent per year. But its environmental problems are taking 8–15 per cent off GDP (Brown, 1998; Smil and Yushi, 1998).

Finally, let us bear in mind that the current decline of the environmental resource base worldwide may prove to be minor compared to what could well ensue given exploitation pressures ahead. Cropland is projected to fall from today's meagre 0.27 hectares per capita to only half as much within 30–40 years (Pimentel et al., 1995; Engelman and LeRoy, 1995). The amount of available freshwater runoff used could rise by three-quarters by 2025 through projected population growth alone, i.e., without allowing for any increase in per-capita consumption (Postel et al., 1996). Worse, the number of people facing water shortages today, 500 million, may well soar to 2.5 billion by the year 2025 – an outcome that would be especially critical for the prospects of feeding humanity in light of agriculture's dependence on water (Gleick, 1998; Postel, 2000).

Fortunately there are many opportunities to relieve environmental pressures, both present and prospective, and both through shifts in lifestyles and enhanced technologies, all of which can be promoted by a range of policy initiatives. To counterbalance the outlook for China, note a remarkable planning effort by the Netherlands to establish itself on a track towards a firmly sustainable future. The nation aims to cut:

- CO₂ emissions from 12 tonnes per person per year to 4 tonnes in 2010 and 1.7 tonnes in 2030;
- freshwater use by 38 per cent;
- aluminium consumption by 80 per cent;
- timber use by over 60 per cent;
- cropland use from 0.45 ha. per person to 0.25 ha.; and
- meat consumption by 70 per cent.

Four Illustrative Sectors

To indicate the problems and opportunities ahead in the environmental sphere, consider four illustrative sectors.

Energy

Energy plays a primary part in virtually all human activities, and notably in those that are environmentally adverse. During the past 10,000 years, per capita consumption of energy has increased roughly 1,000 times, and human

numbers the same. So total energy consumption has increased one million times. Today, the industrialized nations consume 70 per cent of all commercial energy, though the developing nations' share is expected to rise by 40 per cent during the period 1993–2010 (World Resources Institute, 1998). We derive 85 per cent of our commercial energy from fossil fuels (Flavin and Dunn, 1997), which have great capacity to harm the environment through pollution impacts as manifested through urban smog, acid rain and global warming.

From 1970 to 1990, the world's energy consumption increased at an annual average of 2.3 per cent. Extrapolated, this rate means that during just the next half-century there would be a four-fold increase to 50 TW or so, followed by still greater increases thereafter (Holdren, 1991). If energy continues to derive primarily from fossil fuels, then for climatic reasons alone this would tax the ultimate limits of the Earth to maintain environmental viability. Fortunately there is an alternative scenario, based on stringent but practicable measures of energy efficiency and conservation during the period 1990–2025. This would plausibly lead to a modest rise in per capita energy use (from 1 to 2 kW) on the part of developing nations and a graduated decline (from 7.5 to 3.8 kW) for industrialized nations, with both parties converging on 3 kW late next century, thus closing the rich/poor gap. Factoring in population growth as well, this would result in global energy use of well under 20 TW in 2025 and around 30 TW in roughly 100 years' time, based on a world with roughly 2.3 times its present level of economic activity as measured by energy use (Holdren, 1991). This scenario is eminently attainable provided there is an urgent and vigorous policy commitment to greatly reduce per capita consumption by affluent communities in particular, and to use more non-polluting and renewable sources of energy.

The energy problem is epitomized by cars. In 1950, 2.5 billion people owned 50 million cars. Today, with rather more than twice as many people, there are ten times as many cars. Within another 25 years and with 40 per cent more people, the motor vehicle population may well top one billion (Tunali, 1996). OECD nations, with 16 per cent of the world's population, own 81 per cent of all cars (the United States 35 per cent, Europe 37 per cent), and emit two-thirds of all CO₂ emissions from motor vehicles worldwide. But in 1997 as many cars were sold in Asia as in Western Europe and North America combined. Global energy use for transportation is predicted to rise by at least 50 per cent during the period 1993–2010, and by twice as much in developing nations (World Resources Institute, 1998). Were the world to match Americans' present car ownership ratio by 2025, the global total would be 13 times greater than today's, when motor vehicles account for over 15 per cent of all CO₂ emissions (23 per cent in Britain and 25 per cent in the United States).

Surely within 100 year's time – and hopefully within just a few decades – we shall achieve the transition from the highly polluting fossil fuels that dominate our energy systems today to an array of clean and renewable

energy sources. Indeed there are strong signs that the transition is well underway already, as witness the solar- and wind-power investments of British Petroleum, Shell and Arco as they shift from being oil businesses into energy enterprises. Such is the promise of the “clean and renewables” that, to cite energy expert Amory Lovins (in Hawken et al., 1999), “Oil will soon become uncompetitive even at low prices before it becomes unavailable even at high prices.” Equally promising are the many emergent shifts in the “car culture” (see below).

Water

Humans withdraw water from rivers, lakes and other freshwater bodies for three main uses: household, industrial and agricultural (mainly irrigation, 65 per cent of all consumption). We need to produce twice as much food during the next 30 years simply to keep up with the projected rise in human numbers and human nutrition. Since at least half of this increase is scheduled to come from irrigated croplands, this places a premium on more efficient use of water. But there will be no good water management when subsidies are munificently dispensed to rich and poor alike, encouraging waste. The hard-scrabble rice farmer should not have to pay the same amount for his water as the car manufacturer, the chemicals producer, the swimming pool owner and the golf player who do not pay the full cost of their water. As a measure of what can be done, note that Israel, the most water-efficient nation in the world, enjoys a renewable per capita water supply of only one-quarter as much as many other nations, but it encourages efficiency of water use by keeping subsidies low.

Water is a renewable resource. It is available for repeated recycling, and thus it contrasts strongly with other natural resources such as topsoil and fossil fuels. But from the United States and Britain to Mexico and India, water is mis-used and over-used, largely because of government subsidies that discourage people from making improvements. Fortunately, and primarily through slashing of subsidies, developing countries – these being where water shortages are likely to become most pronounced – could eliminate almost two-thirds of their present water losses due to wasteful use of water. This would be equivalent to increasing their actual water supplies by fully one-quarter (Postel, 1999; see also Falkenmark, 1999; Gardner-Outlaw and Engelman, 1997; Serageldin, 1998).

Water is becoming scarce in many parts of the world. Global consumption has tripled during the four decades from 1950–90, and demand is expected to double again during the two decades from 1991–2010. The number of people experiencing water shortages is already 500 million or almost one in ten of humankind, and it is projected to reach 2.5 billion by 2025, or three persons in ten (Gleick, 1998; Postel, 2000; Seckler et al., 1998). These people use no more water for all purposes each day, viz. cooking, washing and sanitation, than an affluent person uses with every flush of the toilet. In parts of the north China plain around Beijing and Tienjin, over-pumping of

groundwater means that water tables are dropping by 1–1.5 metres per year. The region contains nearly a half-billion people, or almost 40 per cent of the country's populace. It also encompasses half of China's croplands, yet it features only one-fifth of the country's surface water (Postel, 1999).

Over-pumping of aquifers in several regions of the world now totals at least 160 billion tonnes of water per year. Some 1,000 tonnes of water are needed to produce one tonne of grain. So if over-pumping were to be stopped, world grain production would decline by at least 160 million tonnes, or enough to provide the grain needs of 600 million people (Brown et al., 2000). While India's population has tripled since 1950, water demand has climbed to where it may now be double the sustainable yield of the country's aquifers. Water tables are falling by as much as two metres per year in much of the country, and wells are running dry in tens of thousands of villages (Seckler et al., 1998). As a further result, there will eventually be reduced supplies of irrigation water on a scale to cut the grain harvest by as much as one-quarter (Brown et al., 2000). In a country where more than half of all children are underweight, and a country that takes on board an additional 18 million people each year, a shrinking harvest could likely increase hunger-related mortality.

Biodiversity

The environmental problem with longest term repercussions (millions of years before the damage can be restored) is the mass extinction of species that is underway. We are well advanced into a mass extinction; during the past half-century, we may well have eliminated at least 300,000 species out of a putative planetary total of 10 million species (Myers, 2000a). If we carry on with "business as usual," we are likely to lose at least half of all species within the next century (Ehrlich and Wilson, 1991; Pimm et al., 1995; Raven, 1990; Wilson, 1992). This would constitute a greater mass extinction than any since the demise of the dinosaurs and associated species 65 million years ago; in certain respects, it would be the greatest extinction spasm in the four billion years of life's history (Myers, 1996).

According to evidence from mass extinction in the prehistoric past, evolutionary processes would not generate a replacement stock of species within less than five million years. This would be twenty times longer than humans have been a species. Suppose that the average global population during those five million years is not the six billion people of today, but a more supportable 2.5 billion. This means the total over five million years will be in the order of 500 trillion people, or 10,000 times more than all the humans who have existed to date. Even one trillion is a large number; consider the length of time made up of one trillion seconds. All in all, the present mass extinction implicitly represents the biggest "decision" that has ever been taken by one human generation on the unconsulted behalf of future generations.

Conservationists are far from able to assist all species under threat, if only

for lack of funding. The problem is set to grow worse rapidly because of the rapid acceleration of extinctions, even if support funding were to be increased several times over. This places a premium on conservation priorities: how to support the most species at the least cost? One principal way is to identify "biodiversity hotspots," being areas where exceptional concentrations of endemic species are undergoing exceptional loss of habitat. As many as 44 per cent of all vascular plant species and 35 per cent of all vertebrate species except fish are confined to 25 hotspots comprising merely 1.4 per cent of the earth's land surface. These hotspots also feature at least 60 per cent of all species whether endemics or not, and some 70 per cent of all species known to be threatened. Similar proportions surely apply to insects and other invertebrates as well, allowing the hotspots analysis to cover virtually the entire planetary spectrum of species (Myers et al., 2000; see also Mittermeier et al., 1999).

Thus the hotspots strategy opens the way for "silver bullet" responses on the part of conservation planners, focusing on the hotspots in proportion to their share of the world's biodiversity at risk. Such a strategy makes next century's prospect much less daunting and far more manageable. Indeed an earlier and much more limited version of the strategy, formulated in the late 1980s (Myers, 1988 and 1990), has attracted over \$400 million in conservation funding around the world. This is far and away the largest sum ever mobilized for a single conservation measure, and reflects the world's perception of its stake in biodiversity.

Environmental Surprises

Finally, let us look at what may well turn out to be the biggest environmental challenge of all: the problems we have not even identified as yet. These "surprise phenomena" could prove to be so potent that they could cause the environmental crisis to gather pace until it overwhelms the planetary ecosystem even more rapidly than is usually supposed. Such surprises include, notably, environmental discontinuities with their ecological synergism. In this marked respect, the future may prove to be far from a simple extension of the past. We should anticipate that environmental discontinuities will become a prominent feature of the future, many of them arising from synergistic interactions between two or more environmental problems.

Both discontinuities and synergism have the capacity (a) to be profoundly disruptive of ecosystems and ecological processes, and (b) to catch us unawares by overwhelming our anticipatory and preventive capacities. Indeed, the worst environmental problems ahead will often be the ones we have scarcely thought of. To cite Benjamin Disraeli, "What we anticipate does not regularly occur, while what we least expect often happens." Recall that at the Stockholm Conference on the Human Environment in 1972, there was no mention of acid rain, tropical deforestation, mass extinction of species, ozone layer depletion, global warming or several other issues that

subsequently became prominent – and that could have been identified ahead of time if only scientists had felt inclined to consider “unknowns.”

The potential surprises of the future deserve priority attention from environmentalists. Yet a library computer check reveals few substantive efforts to broach them even in exploratory terms. They remain black holes of research. We constantly claim to be surprised by the “sudden” onset of a discontinuity, even though in the cases of global warming and ozone layer depletion our most advanced atmospheric models tend to discount, by virtue of their very structure, the possibility of discontinuities. We should anticipate, moreover, that as human communities continue to increase their numbers, consumption demands and over-exploitative technologies – a redoubtable triad – they will exert ever-expanding pressures on ecosystems and natural resource stocks. In turn, certain of these ecosystems and stocks will prove ever-less capable of supporting the needs of humans.

The plausible upshot is that environmental discontinuities will become more frequent. To illustrate the scope of potential impacts, the human triad can readily overwhelm the environmental underpinnings of agriculture, leading to a downturn in the capacity of agriculture to sustain human communities at their erstwhile level (Brown, 1998). As a result, established farmlands will no longer be able to do their job of feeding the burgeoning numbers of humankind.

Policy Responses

General

As an illustration of policy responses available, certain governments are seeking to devise more accurate measures of our economic well-being, by replacing GDP with Net National Product or an Index of Sustainable Economic Welfare. Certain economic sectors are engaging in “full cost pricing” in order to internalize environmental externalities. There is much scope to reform the tax system so that we no longer penalize productive activities such as individual work and business profits, but shift the tax burden to negative activities such as over-use of key natural resources or generation of pollutants among other wastes. All these initiatives help to safeguard our environments and to make our economies more sustainably productive and efficient.

Expanding Eco-technologies

Now that environmental resources are being degraded and depleted, we need to move towards economies that safeguard the environmental supports of our economic activities. Conventional economies are remarkably inefficient. In the United States, materials used by industry’s metabolism per day amount to more than 20 times the weight of all Americans. Yet, only one

per cent of the materials flow ends up in products that are still in use six months after sale, the rest being junked (Hawken et al., 1999). Better would be industrial parks where each manufacturer feeds upon the wastes of others until emissions are finally reduced to zero. In short, this “industrial ecology” eliminates not only waste but the very idea of waste itself – as is practised by nature with its closed-loop ecosystems.

There are success stories along these lines in Sweden, Denmark, Colombia, Namibia, Kenya and Fiji. The Ebara Corporation in Japan and DuPont in the United States are formally committed to zero waste, while the Asahi Beer Company in Tokyo already recycles 98.5 per cent of its raw materials. Bristol-Myers Squibb claims that the economic benefits of pollution prevention exceed costs four-fold. Much the same applies to energy efficiency. The U.S. Energy Star Program enables televisions and videos to reduce by 75–95 per cent the energy used in standby mode, which currently costs Americans more than \$1 billion a year.

Much can be done to promote eco-technologies for energy efficiency, recycling, closed-loop systems of manufacturing and zero-emissions industry. There is huge potential for clean and renewable sources of energy. Wind power has become a \$3 billion per year industry that serves as a cornerstone of a new solar economy to replace fossil fuels. Denmark generates 8 per cent of its electricity through wind power. It is partly due to the rise of wind and solar power among other clean and renewable energy sources that oil and natural gas consumption has increased by only 2 per cent during the 1990s, while coal consumption has not increased at all (Brown et al., 2000). Wind power and photovoltaic cells, both being climate-benign energy sources, have been expanding by 22 per cent and 16 per cent a year respectively. India aims by 2012 to provide 10 per cent of its electricity from renewable sources. With 900 megawatts of generating capacity, India is the leader in the developing world for its potential in wind power (Brown et al., 2000).

To achieve sustainable economies, we need to reduce our materials and energy intensity (the amount used per unit product) by 50 per cent worldwide. Given that developing countries will be reluctant, let alone able, to do so for a while to come, developed nations should aim to cut theirs by 90 per cent. A 90 per cent reduction should not be so difficult as it might appear. When we learned to substitute coal, machines and technologies for human muscle, we expanded worker productivity 200 times within half a century.

The strategy is known as “Factor Ten.” It is entering the vocabulary of government officials, economist planners, scientists and business leaders around the world. The governments of Austria, the Netherlands and Norway have already committed themselves to pursuing 75 per cent, or Factor Four, efficiencies – meaning that by using existing technologies we could enjoy twice as much wellbeing while using half as many materials and causing half as much waste. The same strategy has been endorsed by the European Union as the new paradigm for sustainable economies. Better still, Austria, Sweden and the OECD have urged the adoption of Factor Ten, as

has the World Business Council for Sustainable Development. Leading corporations such as Dow Europe and Mitsubishi Electric see it as a powerful approach for gaining competitive advantage.

Illustrative of the radical new approach is the so-called hypercar conceived by Amory Lovins. Because it would be largely made of advanced polymer composites, especially carbon fibre, it would use one-third less aluminium, three-fifths less rubber, four fifths less platinum, and nine tenths less steel. Hence it would weigh only one-third as much as today's car. Thanks to these and other design efficiencies, notably a hybrid-electric drive, it would get 80–200 miles per gallon, it would be 95 per cent less polluting, and it would be almost entirely recyclable (Hawken et al. 1999). Hypercars could eventually save as much oil as OPEC now sells. They would be not so much cars with microchips, as they would be computers on wheels.

Among other techno-breakthroughs already in view are: diodes that emit light for twenty years without bulbs; ultrasound washing machines that use no water, heat or soap; deprintable and reprintable paper; plastics that are both reusable and compostible; roofs and roads that do double duty as solar energy collectors; extra-light materials stronger than steel; and quantum semi-conductors that store vast amounts of information on chips no bigger than a dot (Hawken et al., 1999).

Over-visionary as this may appear to some eyes, the advance towards economies based on “natural capitalism” is surely as inevitable as it is possible. We live at a time when by force of environmental circumstance there is a strong convergence between the idealistic and the realistic. In short, we have hitherto sought to exploit the resources of the planet in support of the human cause. Now we need to exploit human resources, also known as brain power, in support of the planetary cause – and thereby give ourselves an expanded prospect of securing the human cause as well.

Cutting Perverse Subsidies

Among policy openings, there can hardly be one with greater potential payoff than “perverse” subsidies. These are subsidies that are harmful to both our economies and our environments (Myers and Kent, 1998). A notable example lies with marine fisheries, which have left numerous fish species on the edge of commercial if not biological extinction. The fisheries catch – well above sustainable yield – costs more than \$100 billion a year to bring to dockside, whereupon it is sold for around \$80 billion, the shortfall being made up with government subsidies. The result is depletion of major fish stocks and endangerment of certain species, plus bankruptcy of fishing businesses and much unemployment.

Perverse subsidies are prominent in six leading sectors: agriculture, fossil fuels/nuclear energy, road transportation, water, forestry and fisheries. Subsidies for agriculture foster over-loading of croplands, leading to erosion of topsoil, pollution from synthetic fertilizers and pesticides, release of greenhouse gases, and grand-scale loss of biodiversity habitat. Subsidies for

fossil fuels aggravate pollution effects such as acid rain, urban smog and global warming, with all the profound impacts these will generate for wild-lands. Subsidies for road transportation promote pollution at local, national and global levels, plus excessive road building with loss of landscapes. Subsidies for water encourage mis-use and over-use of supplies that are increasingly scarce in many lands. As noted, subsidies for fisheries foster over-harvesting of depleted fish stocks. Not only do these environmental ills entail economic costs in themselves, but the subsidies serve as direct drags on the efficient functioning of economies overall.

Subsidies in these sectors total around \$1.9 trillion per year, and perverse subsidies almost \$1.5 trillion. Plainly, perverse subsidies have the capacity (a) to exert a highly distortive impact on the global economy of \$34 trillion, and (b) to promote grand-scale injury to our environments. On both counts, they foster unsustainable development. Ironically, the total of almost \$1.5 trillion is two-and-a-half times larger than the Rio Earth Summit's budget for sustainable development – a sum that governments claimed could not be found at all.

If perverse subsidies were to be reduced, there would be a double dividend. First, there would be an end to the formidable obstacles imposed by perverse subsidies on sustainable development. Second, there would be a huge stock of funds available to give an entirely new push to sustainable development – funds on a scale unlikely to become available through any other source. In the case of the United States, for instance, they would amount to over \$300 billion, or more than the Pentagon budget. An American pays taxes of at least \$2,500 a year to fund perverse subsidies, and pays another \$2,500 through increased costs for consumer goods and through environmental degradation. Were just half of the world's perverse subsidies to be phased out, just half of the funds released would enable most governments to abolish their budget deficits at a stroke, to reorder their fiscal priorities in fundamental fashion, and to restore environments more vigorously than through any other single measure.

Curbing Excessive Consumption

The often extravagant and wasteful consumption of affluent communities constitutes an environmental constraint that is ever-more constraining for rich and poor alike. Furthermore, the skewed consumption patterns between rich and poor may well mean the point is being approached when – contrary to much past experience – the poor are poor in part because the rich are rich. Worse, the rich/poor gap is growing. In 1970 it was 30:1; today it is 78:1 (World Bank, 1999). To this extent, the consumption problem is not only environmental but ethical as well (Ehrlich et al., 1996; Myers, 1996).

Consider that during 1999 the 730 million people of Europe have emitted some six billion tonnes of CO₂ to the global atmosphere, being 26 per cent of worldwide emissions (CO₂ is the gas that generates roughly half of global warming processes) (Myers, 2000b). Europe's contribution is double that of

China's 1.2 billion people. All nations will be affected by global warming, whether they are major or minor sources of CO₂.

Industrialized nations as a whole generate three-quarters of other wide-ranging pollutants, as well as toxic chemicals and hazardous wastes. Much the same applies to depletion of the world's non-renewable natural resources (Ehrlich and Ehrlich, 1996; Redclift, 1996; Serageldin, 1998).

Thus the consumption problem centres on the way people live and, hence, the amounts and kinds of resources they consume (whether directly or indirectly), plus the pollution and other wastes they generate. Since the middle of the last century, humankind has consumed more natural resources (and caused more pollution and waste) than in all previous human history. This consumption outburst can be illustrated by a few examples that also demonstrate the roles of the affluent sectors of the global community:

- Since 1950, the global economy has quintupled. Consumption of grain, beef and mutton has tripled, and the same for water, while paper consumption has risen six times. Burning of fossil fuels has grown nearly four-fold, and carbon emissions likewise (Brown et al., 1999).
- The top one-fifth of the world's population owns 86 per cent of the world's wealth, controls 82 per cent of the world's markets, 68 per cent of foreign investment, and 74 per cent of telephone lines. The bottom one fifth score just one per cent in each of the categories.
- Since 1950, the richest one-fifth of humankind has doubled its per-capita consumption of energy, meat, timber, steel and copper, and quadrupled its car ownership, while the poorest one-fifth of humankind has increased its all-round per capita consumption hardly at all (Durning, 1996). Today the richest one-fifth consumes 45 per cent of all meat and fish, the poorest one-fifth 5 per cent; 58 per cent of all energy, versus 4 per cent; and 84 per cent of all paper, versus 1 per cent. The richest one-fifth owns 87 per cent of the world's vehicles, versus 1 per cent. As for CO₂ emissions, the developing countries emit 37 per cent of the total (United Nations Development Programme, 1998).
- With less than 5 per cent of the world's population, the United States utilizes nearly 30 per cent of the Earth's resources (Dower et al., 1996). Yet the "American dream" – the lifestyles of other affluent nations too – is becoming a model for new consumers in China, India, Brazil, Mexico, Turkey and Russia among several other leading nations. Indeed, these new consumers already total 800 million, or as many as the long-established consumers in rich nations (Myers and Kent, 2000; Naisbitt, 1997).

There is nothing intrinsically wrong with affluent communities consuming a large per centage of natural resources if those resources remain plentiful and can be recycled, as in the case of iron and steel (85 per cent of which is consumed by the top 20 per cent of people, and 55 per cent of which is recycled; the top 20 per cent do not thereby limit the consumption of poor people). Indeed, the affluent communities' conversion of natural resources into human capital often enhances human welfare all round. It is of scant

consequence that the average American consumes 115 times as much paper as the average Indian, provided the American recycles most of the paper (at present, only 41 per cent). Much more significant is that the average American consumes 227 times as much gasoline as the average Indian (United Nations Development Programme, 1998). The key question is whether consumption uses resources, or uses them up.

Current consumption patterns will change if only through factors of environmental constraints, which are becoming ever-more forceful (as witness global warming, to cite just the most prominent of a multitude of constraints) (Myers and Kent, 2000). That is to say, consumption will change by design or by default. Some observers maintain that humans are unwilling to change their urge to consume more and more. After all, throughout their history humans have believed that more of anything must be better; and they have had good reason to believe so. Now we need to move on to "More is better, enough is best." Fortunately, there is evidence that consumption behaviour is more plastic than one might suppose: during a recent 20-year period, almost 40 million Americans have given up smoking (nearly half of all living adults who ever smoked). This has been a seismic shift in consumption.

Role of the United Nations System

Much of the above places a premium on action at an international level – and often at supranational or global level. There is no better body to undertake this work than the United Nations system with its agencies, plus the system's multiple networks to civic society, the business community and the media among other major actors in global governance. Already there is a huge number of UN initiatives expressed through legal measures alone, in the form of conventions and treaties. Notable instances include the Convention on Wetlands of International Importance, 1971; the Convention on the Protection of the World's Cultural and Natural Heritage, 1972; the Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973; the Convention on Conservation of Migratory Species of Wild Animals, 1979; the Convention on the Law of the Sea, 1982; the Montreal Protocol for the Protection of the Ozone Layer, 1986; the Convention on Biological Diversity, 1992; and the Framework Convention on Climate Change, 1992. In addition there is a host of regional efforts such as the Convention on Conservation of Antarctic Fauna and Flora, 1964, and the African Convention on Conservation of Nature and Natural Resources, 1968. All these exemplify the capacity of the United Nations to supply political forums, policy arenas and action agencies for the global community to tackle its concerns.

At the same time, the United Nations system supplies our principal mode for the international community to come together and address those diverse challenges that (a) affect many or all nations and (b) cannot be resolved except through collective action. Obvious examples include ozone layer de-

pletion, marine issues and global warming. The system possesses comparative advantage without parallel to pursue its work via partnerships among nation-states, international organizations, commercial bodies and civil society actors (NGOs).

The United Nations also features exceptional capacity for research and other scientific endeavours, primarily through its University in Tokyo with its associated bodies, such as the Institute for Advanced Studies. The next century will surely throw up an entire agenda of new environmental problems, such as the surprise phenomena described above. What better body to undertake the exploratory research than the UNU?

Summation and Conclusion

This paper demonstrates that, as we enter the new millennium, our prospect is dominated by two prime points:

First, we face unprecedented problems in the environment arena writ large. These problems are closely interlinked with issues of population, technology, consumption, equity, sustainable development and North/South relations.

Second, these problems invoke opportunities of parallel scope. There is much cause for hope – the most precious and often the scarcest resource of all. To hearten us on our way as we seek to live in better accord with our environments and with each other, let us note some recent success stories:

- Sales of solar PV cells jumped 21 per cent in 1998. Wind power added 2100 MW, 35 per cent over 1997, with sales of \$3 billion.
- Fluorescent lightbulb sales have now topped one billion, cutting electricity demand by the equivalent of 100 coal-fired power stations and thus reducing CO₂ emissions.
- Sales of cellular phones increased in 1998 by 48 per cent, to 2.4 million, saving on huge amounts of copper wire for conventional phone systems.
- In China, both good and bad environmental practices are publicized through a TV programme reaching tens of millions of viewers.
- In Brazil's Curitiba city, low-cost bus services have cut car traffic by 30 per cent even while population has doubled.
- In Japan, the Green Purchasing Network, with over 1000 companies, public agencies and citizen groups, promotes sustainable goods and services, e.g., copiers, printers, PCs and refrigerators.
- In the Republic of Korea Korea, the Waste Collection Charge has cut waste by 20 per cent in just three years, and greatly reduced packaging.
- In Germany, the anti-packaging project has caused a 17 per cent reduction, while the Blue Angel Eco-Label has been awarded to almost 1,000 manufacturers for 4,100 products in 76 categories.
- In the United States, the Energy Star program sets an energy efficiency standard met by two-thirds of computers and monitors and all laser printers. New criteria for TVs and videos will reduce by 75 per cent the energy in standby mode, which currently costs more than \$1 billion a year.

- In the United Kingdom, the Sustainable Timber Buyers' Group has 80 members ranging from general shops to DIY stores, accounting for 18 per cent of wood products.
- In Denmark, a waste tax doubles the cost of landfilling and incineration, causing a 30 per cent increase in reuse and recycling.
- In Colombia, new toilets have cut water consumption by over half.
- More than 100,000 people in 230 European cities now participate in car sharing (not car pooling).

These various forms of resource efficiency point up a key factor. The environmental cause often saves us money right away: what supports the environment supports the economy. The development cause is different in that it usually entails outlays with no payoff for lengthy periods. Fortunately, the costs of a paradigm shift to sustainable development need not be so costly at all. Just as it will not cost the earth to save the earth, so our efforts to safeguard our world and our global community will demand no great expenditures. Some examples (United Nations Development Programme, 1998) are:

Cost of supplying basic education to all children:	\$6 billion per year
<i>Spent on cosmetics in just the United States:</i>	<i>\$8 billion per year</i>
Cost of supplying water and sanitation for all:	\$9 billion per year
<i>Spent on ice cream in Europe alone:</i>	<i>\$11 billion per year</i>
Cost of basic health for all:	\$13 billion per year
<i>Spent on pet food in Europe and the US:</i>	<i>\$17 billion per year</i>
Cost of eliminating malnutrition in developing countries through improved agriculture:	\$40 billion per year
<i>Spent on countering over-nutrition in developed countries through slimming aids:</i>	<i>\$40 billion per year</i>

The vital question is not "How can we afford to do what is necessary?" It is "How can we afford not to do it?" The biggest cost will not be to our pocketbooks, it will be to our philosophies. The challenge will also tax our perceptions of the ability for the worldwide community – national governments, international agencies, the corporate community, NGOs, the media – to make common cause in tackling problems common to all and amenable only to common solutions. A prime role will belong, of course, to the United Nations system with its specialized agencies and its capacities to rise above national concerns and focus on those concerns that, intrinsically and increasingly, are of supranational – if not global – scope.

Shall we choose to operate as one human collectivity worldwide? This is surely the foremost challenge of the new century. We shall either witness an earth and a world impoverished to unprecedented degree, or enriched to unprecedented degree. We can avoid an environmental debacle with extensive sectors of the biosphere undergoing terminal threat; instead, we can fashion a world with an end to hunger, illiteracy, pandemic diseases and absolute poverty. Most important of all, we shall live in a world where we shall function as one global community. After all, we shall all work together to stem global warming, or we shall all find we suffer the consequences

together. Either way, and for the first time in humanity's course, we shall all experience the future together: globalization indeed. What an exhilarating prospect as we take our first steps into the next century!

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Strengthening the United Nations: Ten Suggestions

Yasushi Akashi

Predictions about the twenty-first century will be as dubious as prophecies made at the beginning of the twentieth century, most of which did not come true. Today, we live in a world of glaring contradictions. Inexorable forces of globalization are lowering national barriers and are enabling goods, money and information to travel freely and instantaneously all over the Earth.

Unlike the transfer of money and information, however, the movement of labour still creates controversy, and trade issues are still transacted on a government-to-government basis. Globalization is expanding, while internationalization – based on the premise of the existence of nation-states – is also running on a parallel track, as witnessed at the recent World Trade Organization meeting in Seattle.

Concepts and values are increasingly shared on a global basis, but resistance to globalization is also becoming stronger. It manifests itself in the form of growing nationalism – Japan being no exception – ethnic chauvinism or religious fundamentalism. We will probably continue to live in the midst of such contradictions for the foreseeable future.

The objective reality of interdependence is juxtaposed with the psychological resistance to it by assertions of national, ethnic, cultural and local identities. The United Nations cannot exist above these contradictory trends and is, in fact, sandwiched between unrealistically high expectations on one hand, and unjustifiably poor appreciation of its potential capacity, on the other.

Space does not permit a lengthy exposition of my vision of the United Nations of the twenty-first century. This paper will itemize what I consider to be necessary elements for endowing the United Nations – the sole uni-

versal political organization – with real clout, greater influence and higher legitimacy.

- The Security Council must be strengthened by a limited expansion of its permanent as well as non-permanent membership. It is not realistic to abolish the veto of the big powers, but we should initiate restricting its use to enforcement action under Chapter VII of the UN Charter. It is also important not to apply the veto to the election of the Secretary-General. We are left with a bitter after-taste of the episode of three years ago. The mandate of the Secretary-General should be for two five-year terms each, or a single seven-year term to avoid undue politicization.
- Since the end of the cold war, the General Assembly has been in the shadow of the revitalized Security Council. This has to be changed: the General Assembly, after all, is the deliberative organ of all Member States and confers universal legitimacy. I wonder why the “Uniting for Peace” resolution of 1950 was not dusted off and used at the time of the Kosovo crisis. The Security Council, however, preferred to ignore the assembly, and no action was taken to approve the NATO bombing of Yugoslavia. I suggest a more frequent use of emergency special sessions of the General Assembly, and the restoration of its interim committee of 1947 as an inter-sessional standing body. This may go some way towards restoring the balance between the assembly and the council.
- As general opinion holds, the Economic and Social Council has to be strengthened. Each session of the ECOSOC should be thoroughly prepared by a small preparatory body. The ECOSOC has already been moving toward a more thematic, focused approach, but its reform cannot take place without revisiting the working methods of the second and third committees of the assembly.
- It was a mistake to lower the criteria for membership of the United Nations, provided for in Article 4 of the Charter. In recent years, permitting micro-states to become members has weakened the Organization. No country that cannot afford a certain minimum contribution, say 0.1 per cent of the regular budget, should be allowed membership in the United Nations. Small geographical entities should instead be encouraged to opt for associate membership to enjoy appropriate rights and privileges. This proposal should not, however, be applied retrospectively to existing member states.
- Enhancing the Secretary-General’s authority and the efficacy of the Secretariat is of vital importance. The International Civil Service Commission, which has sometimes been circumvented by the Fifth Committee of the General Assembly, should be used to ensure recruitment and retention of the highest caliber individuals from all Member States. The UN emolument must be based on the Noblemaire principle.

The Secretary-General should also be allowed to call upon the best minds available in the intellectual and scientific community for advice. With the help of UNESCO, the United Nations should resuscitate efforts for a universal textbook on history.

- All proposals for strengthening the United Nations will be hypocritical unless they are accompanied by serious efforts to improve its budgeting and financing. The League of Nations died from the short-sighted financial penury of its members. Its successor is in danger of facing a similar fate. All assessed contributions are legally binding, and late-paying states, especially developed states, should be penalized. Contributions should be based mostly on the “capacity to pay,” that is, on gross national product, but special account should be taken of the rights and privileges of permanent membership in the Security Council, as is done in case of peace-keeping assessments.

Moreover, innovative methods of financing should be gradually introduced, such as facilitating of contributions by individuals and multinational corporations and UN taxation of international air travel, with the proviso that this type of financing should not exceed one-third of the regular budget. Nor should it distort UN priorities.

- The United Nations of tomorrow cannot exist without greater support by civil society. Therefore, the United Nations should create a consultative people’s assembly chosen by direct vote of the people of the world. NGOs should have more frequent contact with UN agencies and should participate in their decision-making when appropriate. At the same time, their representativeness should continue to be closely scrutinized. There should also be more systematic interchange among parliamentarians of the world and more consultations with the business community and mass media leaders.
- Global efforts of UN agencies should be supplemented by active regional collaboration in various regions. Asia, in particular, should promote greater collaboration of countries in the region, based on pragmatic needs, greater transparency and confidence-building measures. Regional cooperation and worldwide cooperation are complementary, and care should be exercised to ensure that each region does not degenerate into a sphere of influence under a regional hegemon.
- Peacekeeping operations are like a tender flower in need of careful cultivation as a unique achievement of the United Nations since 1948. Peacekeeping should adapt to changing times and needs to become more robust in line with the greater complexity of tasks required. The Organization should, however, be careful not to become too reliant on military means for enforcement. Chapter VII provides for a wide variety of sanctions, and thought should be given to various nonmilitary means of putting pressure on violators of the Charter and international law, as provided for in Article 41 of the Charter. The principles of impartiality and nonpartisan approach should not be forsaken for high-sounding moral exhortation even if this seems to be popular in some member states and in mass media, and is suggested in some quarters.
- A constructive dialogue between the United Nations and the Group of Eight major nations should be encouraged. The G-8 provided a useful framework to identify a solution to the Kosovo crisis. In the absence of a

serious revamping of the Security Council, the G-8 approximates a concert of powers in today's world. Though composed only of developed states, it can be a useful instrument to resolve North-South disparity and conflict. The United Nations can restore its great relevance to the contemporary world by endeavouring to better reflect the relationship among the major powers. It should also not be forgotten that many worthwhile initiatives are taken by the so-called "middle powers" in fields such as disarmament and development.

How do we ensure that the above 10 proposals will be realized? In my view, there is no shortcut. It will be through the concerted, painstaking efforts of officials and leaders within and without the United Nations and member governments, joined by an ever-widening circle of non-governmental actors and supporters all over the world. Practitioners have to become more visionary and less cynical. On the other hand, outside supporters and globalists should be more pragmatic and tactically oriented.

In the absence of any better alternative, we have to aim at a more effective United Nations. And it can be brought to reality only through the persistence, skill, imagination and dedication of all those who are convinced that national, local and other interests and concerns can and must be harmonized and satisfied within the universal framework of a radically revitalized United Nations.

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