

Over the past century, industrial production has multiplied 50-fold. We may project a future world economy multiplying first 5-fold and then 10-fold. We may project a world population doubling or tripling some time in the next century. But we will never reach such a stage, because the carrying capacity of the earth will have been exceeded. This is why we are compelled to manage a transition more important than the agricultural and industrial revolutions.

History is full of examples of how human ingenuity can be wonderfully creative, but also incredibly destructive. We have no other option than to change, to change profoundly, and to make change our friend, not our enemy. The policy platform of the new administration includes American leadership on global environmental issues. This means dealing with big issues, controversial issues, complex issues—issues we cannot afford to ignore.

The START II agreement, the chemical weapons agreement, and all the other major breakthroughs in disarmament which have made this world a safer place for ourselves and our children must be followed by equally bold steps that will safeguard the future of our planet.

Today, despite the problems in places such as the former Yugoslavia, Iraq, Somalia, or Cambodia, the gravest threats to our future come not so much from military aggression as from our own way of living, from tacit acceptance that poverty and destitution are facts of life in the South, and from extravagant use of natural resources in the North. This means we must deal with environment and development not merely as a pollution problem, but as a challenge to the present inadequate way in which our countries and the world are organized and governed.

Exponential growth in our use of finite natural resources will inevitably come to a full stop. By means of example, with a double-digit, coal-fired economic growth in China, dwindling food production in Africa, and competition for water in the Middle East, our earth will become uninhabitable. We must chart a new course for global development, and soon, before it is too late.

## Our Common Future

The rich world has had a firm grip on the Third World for hundreds of years. We are now in a situation where that picture may change because we in the North have become increasingly dependent on developments in the Third World.

If the Third World sees no option but to follow unsustainable development policies, we too will become the victims of a shrinking ozone layer, of global warming, loss of biodiversity and contamination of food chains—all global problems that cannot be stopped by border controls.

At the Rio Conference on Environment and Development in June 1992, the developing countries presented their demands for equity and justice. They were right to point out that it is the industrialized world which is placing the greatest burden on the global environment.

They were reluctant to accept new requirements for self-restraint, and pointed to how the rich world has been developing for decades without concern for the environment or finite natural resources. They rightly stated that poor and underdeveloped coun-

By  
The Honorable  
Gro Harlem  
Brundtland

# Sustaining the Global Environment

" It is in our  
own interest  
to assist the  
poor countries  
to achieve  
sustainable  
growth, and to  
integrate them  
thoroughly  
into the global  
economy"

tries could not be asked to forego development because the rich countries already had used up environmental space.

The World Commission on Environment and Development, which I had the honor to chair, worked to find common ground between the North and the South. Our report, *Our Common Future*, which was issued in 1987, focused on underdevelopment and poverty as a main cause and effect of environmental problems in the South. It focused on a different kind of underdevelopment—the overuse of natural resources—as a main cause of environmental problems in the North.

Poor people and poor countries have few options but to overexploit their environment in order to survive. Poverty and uncertainty about the future serve as incentives for people to have more children, since in many countries children become an economic asset to the family even before they are 10 years old. When the population grows faster than the economy, if the latter grows at all, poverty becomes endemic. Rising numbers of poor, uneducated people who lack health services, safe water, and energy will inevitably undermine their own environment and deplete the resources on which future generations depend.

The world population is now about 5.5 billion, and it is growing exponentially. The World Bank stipulates that it might stabilize at some 12.5 billion by the middle of the next century. But where precisely it stabilizes in the range between 8 billion and 14 billion will depend on policy decisions.

This is why it is so important that President Clinton has argued for the resumption of U.S. funding for the United Nations population activities. Sound population policies must include far more than family planning alone. Raising the status of women, rising

incomes for families, improved health and education are equally important.

The situation in Haiti serves as a warning of what may happen if the downward spiral of poverty, population growth, and environmental degradation is allowed to continue unchecked. That country's environment is being destroyed more rapidly than anywhere else in the world.

The boat people making their way to Florida may only be the tiny prelude to the global upheavals we will face. To avoid a proliferation of Haitis and Somalias, we must assist developing countries in making a new start, gradually taking on the rights and the obligations of equal partners.

If we should fail, our predicament can be variously described. Steady deterioration of the quality of life—traumatic for the rich, catastrophic for the poor—is perhaps the least dramatic way of describing humanity's future.

## Foreign Aid Critical

There is, regrettably, "aid fatigue" in the world today, not least as the result of domestic problems in many industrialized countries. Still, we must operate on two fronts. We cannot afford to postpone international problems during our own healing period. I am often asked, for this very reason, by friends in the Third World to emphasize Norwegian aid performance which for many years has remained in excess of 1 percent of GDP, the highest in the world, and three times higher than the average of OECD countries.

Norwegian aid is poverty-oriented, and has focused on health, basic needs, women, children, education, family planning, and, increasingly, on the environment.

Yet aid alone is not sufficient to solve the poverty problem. Aid must be designed to help in building sound national economics, and in implementing policies of social reform.

We must launch a full-scale, committed offensive against poverty and underdevelopment in the Third World. It will not be successful unless the U.S. is willing to take a leading role. If we provide comfort and restore hope, then we can avoid much more costly operations.

Now that communism is no longer a threat to our free societies, containment should no longer be a major motive for foreign aid. We must realize that it is in our own interest to assist the poor countries to achieve sustainable growth, and to integrate them thoroughly into the global economy.

This will require that we relieve their suffocating debt burden, improve the quality and quantity of our foreign aid, while we require that sound domestic, social, and economic policies are implemented. Even more importantly, we must remove our barriers to trade with the Third World, as we must among ourselves. The conclusion of the Uruguay Round is now long overdue.

## Energy is the Key

Energy is a crucial issue. Energy consumption has grown by a factor of 20 over the past 150 years. Energy use is the key to any development strategy.

The triple E's—Energy, Environment, and Economy—are inextricably linked. Unless we find more prudent ways of using energy, this exponential increase in our energy use will continue. The problem will be further aggravated by the increasing needs for energy in the South, where more than 90 percent of the population growth will occur.

Many of today's environmental problems are caused by energy production and consumption. It leads to acid rain,

deforestation, flooded valleys, polluted rivers, erosion of our architectural heritage, and specific disasters such as Chernobyl and the Exxon Valdez.

The World Commission on Environment and Development called attention to the need to improve energy efficiency and to shift toward a more sustainable energy mix. The Commission also pointed to the need to avoid extreme fluctuation in oil prices. We emphasized the difficulty of developing alternative energy sources as long as oil prices remain low, and we recommended that new mechanisms for dialogue between producers and consumers be explored.

It would be highly irresponsible to continue to rely on what I call the "Doris Day doctrine" in global energy relations. While exciting in some human relations, "que sera, sera" is not a principle that can guide our energy future.

We should treasure energy resources more, price them properly rather than subsidize them, and keep more of them available for future generations.

## Implementing Climate Policies

At Rio we adopted what amounted to a watered-down climate convention. It fails to set firm targets, but it is a new beginning and it requires that we start to implement climate policies immediately. Moreover, it is the first of a new generation of international environmental agreements, as it laid down the fundamental principle that solutions must be cost-effective.

The essence of this central principle is that we should aim at achieving maximum environmental benefit for the minimum cost. It is obvious that it will take longer—and we all will lose—if we squander our resources on the most costly problems,

We should not request all countries to reduce their emissions by an equal percentage. Clearly, the marginal costs of

"We should treasure energy resources more, price them properly rather than subsidize them, and keep more of them available for future generations"

"American gasoline is one of the best buys there is in any industrialized country, and such prices offer little incentive for energy conservation"

reducing emissions by, for example, 1 ton will vary greatly from country to country, as well as between different sources within each country.

In a globalized economy, private companies often find themselves caught in a squeeze between the need to respond to national environmental demands on the one side, and short-term profit objectives on the other. They may also be facing foreign competitors who may be subject to less stringent requirements.

Let me use the example of acid rain to illustrate this problem. Acid rain is a serious problem for Norway. Some 90 percent of (his pollution comes with the wind from other countries. The problem must therefore be dealt with at the regional level. Further reductions in our low  $\text{SO}_2$  emissions would cost 10 times as much as similar reductions would in Poland. We could improve the environment far more quickly and cost-effectively by promoting investment in cleanup operations in Poland rather than in Norway.

Norway contributes only about 0.2 percent of global  $\text{CO}_2$  emissions, and can therefore only make a marginal contribution to solving the problem. Nevertheless, we have introduced high carbon taxes. Furthermore, the tax is linked to the transfer of financial resources to developing countries as a means of helping them to curb their own emissions.

The U.S. contributes 25 percent of global  $\text{CO}_2$  emissions. More important, however, are the per capita figures. U.S. emissions amount to 5.8 tons of  $\text{CO}_2$  per person per year, whereas the figure for Norway is only one-third of that. One of the reasons for our low figures is our abundance of hydropower. France has a similar situation, since their nuclear energy influences their statistics.

Although many people have commented on the dubious nature of statistics, it seems irrefutable that the U.S.

could provide a major share of the answer to this global problem. To a non-American, it seems that this could be done by means or measures that would be sensible for a number of reasons, such as, for example, reducing the country dependence on the resources of the Gulf, and promoting development of renewable resources of energy.

Europeans have a hard time understanding how controversial the issue of taxing oil and gasoline is in the U.S. To us very low gasoline prices seem an obvious source of revenue which could provide at least a part of a solution to a deficit problem. Even when adjusted for inflation, the prices in the U.S. after Iraq's invasion of Kuwait were far below those that sent the nation into fury in 1979 and 1980. Still, the price here is only one-fourth of the price in Norway or Italy.

About one-fourth of the price you pay here is tax, while the picture is the opposite in Europe, where up to three-fourths of the price is tax.

Thus, American gasoline is in fact one of the best buys there is in any industrialized country, and such prices seem to offer little incentive for energy conservation.

## Pricing the Environment

Speaking of incentives, the idea of "green" taxes has increasingly become a subject of debate. Given the high level of unemployment in OECD countries, it is no wonder that new taxes are unpopular if they increase the burdens on private enterprise. Green taxes could therefore be compensated by lowering other taxes.

In Norway, an official Green Tax Commission" has studied ways of pricing the environment more properly. In my opinion, sustainable development requires both a high level of employment and an improved environment. This cannot be achieved without changes in our

economic policies. We must consider whether to lower taxes on the "good" things, such as work and investment, and raise taxes on the "bad" things, such as pollution and depletion of natural resources.

A report issued by World Resources Institute indicates that tax increases generally spell trouble by discouraging work and savings, and that they may trigger the flight of labor and capital outside tax jurisdictions. However, a revenue-neutral shift in taxation should be quite possible.

If applied properly, such a shift could harness market forces in support of environmental improvements by inspiring companies and households to act innovatively and efficiently. Such a shift would lead to additional net savings, since damage to the environment and to public health would be reduced, as would the cost of incremental environmental protection measures.

Such a change would be more likely to succeed if it involved dialogue and cooperation between the private and public sectors. Environmental protection need not be antigrowth. On the contrary, it must fuel growth. Some companies may of course face short-term adjustment problems. We should not be euphoric and pretend there will be no problems, but we should have faith in our own innovative capacity. Look at what we accomplished with ozone-depleting substances. They are on the verge of being phased out completely because knowledge and skill were put into action to find alternatives once there were prospects of regulation.

There is tremendous talent available in the United States. There is no reason at all why both the economic and environmental performance of the U.S. should not be the best in the world. I am convinced that millions of non-Americans felt President Clinton was right when he said in his inaugural speech, "There is nothing wrong with America which can -

not be cured by what is right with America."

## The Role of Technology

I believe that all countries, rich and poor, are well advised to invest more in the skills of people. An increasingly well-educated population must be the core of a new supply-side agenda for the 1990s and beyond.

The U. S., Japan, and Europe must be the engines of change, but technological advances in the North will only provide partial solutions unless technology is also disseminated to the Third World. This does not mean that we must weaken the protection that patents provide. In fact, effective patent systems are necessary to promote technology dissemination and transfer, ensuring a proper return on research and development.

Patent protection has sometimes been regarded as a major barrier to the use of technology. However, studies commissioned in preparation for the Rio conference raised doubts about this. The evidence indicates rather that lack of capital, lack of skills, lack of markets, and the weakness of infrastructure are the major barriers to the diffusion of environmentally sound technology.

It is difficult to see how the Third World can become a reliable new market for high-tech products if the knowledge base is too thin. It would therefore be a good international industrial policy for governments to support companies to work with Third World companies in the fields of technology, research, and development.

The 10 largest companies in the United States spend more on research and development than the entire Third World, including China. Clearly, technology cooperation should become a natural part of forward-looking foreign policies.

"Technological advances in the North will only provide partial solutions unless technology is also disseminated to the Third World"

"If we maintain the illusion that each nation can act in isolation, we risk postponement of critical decisions which will only be made effective when states act in cooperation"

The World Resources Institute has found that research and development funding has largely been devoted to fields of little relevance to environmental quality. The heart of the matter seems to be that in many countries the need for new technology to solve environmental problems has been inadequately recognized, and that the role of governments in encouraging such technologies is poorly defined.

One problem is that technology is seldom widely spread when it is based on "technology push." "Need pull" is what is needed instead. The difficulty in the case of environmental technology is that this need is not a private need but a public need. This is a serious problem as our economic systems do not sufficiently take into account harm done to people's welfare or the environment. A part of the solution must therefore be to make economic agents act in harmony with the needs of society today and in the future.

Environmental and other public needs argue convincingly in favor of policies to support environmentally benign technologies. We need industrial policies with targets and purposes that only democratic governments can set.

The 1990s will be a decade of destiny, in which we must summon all our human resources, our knowledge, and our moral conviction to seriously face the real challenges of the future. The forces of technology, of finance, and of electronic communications must not be allowed to take over power which was vested in democracy to shape our future.

### The Challenge of the 1990s

Therefore, the challenge of the 1990s is to deepen and widen the forces of democracy, and to lift democratic decision-making also to the international level. Even the most powerful nation

state is too small for addressing global challenges.

If we maintain the illusion that each nation can act in isolation, we risk postponement of critical decisions which will only be made effective when states act in cooperation. We also risk an increase in the current skepticism and lack of confidence in democracy, politics, and politicians.

People do not believe in politicians when they promise to do what is in reality beyond the reach of their present powers. People are used to holding politicians accountable and to measure the results and how they are able to improve the quality of life. If the results do not meet people's expectations, they are quick to turn against politicians and the political system itself.

If this alienation is allowed to continue, we risk a gradual disintegration of our traditional political institutions. The antipolitical establishment mood in many countries is one such sign. The increasing racism and xenophobia in many European countries today is a frightening reminder of dark chapters of European history.

All our efforts to solve the new global threats must be underpinned by true internationalism. There will be competition, clearly, but such competition between companies and countries must be governed by fair, open, agreed upon, and enforceable rules.

In the final analysis, the problems of environment and development depend on the global dissemination of the ideas of democracy. The unveiling of the environmental ecocide in Eastern Europe, committed under totalitarian rule, clearly shows that only people who are allowed to participate in public life, without fear, will be able to build community purpose, instill social responsibility, and assert the larger vision of a just and sustainable future.

The resource of human minds and our ability to organize our communities, and community of countries, are what we must rely on in a major transition period toward a sustainable relationship between people and the earth. If I had not believed that people would have the capacity to govern and to reconcile the two, I would have felt less inspiration working politically to integrate environmental issues into policymaking as I have been doing for nearly two decades now.

We need a global democracy. This will only be possible if Europe and North America can lead; those parts of the world which have been benefited by the history and tradition of democracy for more than 200 years certainly have a special responsibility.

I want to conclude by reminding you of the words of Winston Churchill, who spoke here, in this same area, 50 years ago. He said, "Europe and the United States must lead, for their own safety, and for the good of all walk together in majesty, in justice, and in peace."

This is exactly the same challenge to us all at this very moment 50 years later.



*Q Will technology alone provide for a sustainable global development, or will we need to look for reductions in the standard of living from the northern countries?*

I believe if we do the right things, if we change our systems, and especially if we start using energy in a better manner than up to now, then we can make a major contribution to the necessary changes that may increase the standard of living which is necessary in the Third World. The focus is *not* to reduce our standard of living, but to change it, absolutely.

*Q I'm curious about the politics of development assistance in Norway. How do you sustain a level of development assistance in excess of 1 percent of GNP? Is this a popular program? What arguments are effective in persuading the Norwegian people to sustain this level of development assistance?*

I can remember many election campaign since the '70s, when I first started as a politician at the national level, where people came up to me in the streets and criticized events they had read about in the papers—e.g., boats carrying food to India. There are always very strong arguments for using the money at home, and there are always needs at home that could be taken even better care of.

My party, and also the conservative party, stood up and said, look, we have to do our share to alleviate poverty and destitution in humanity globally. It is necessary for politicians to make these kinds of arguments. Otherwise the sentiments can spread, and they are dangerous because without a global aspect to our domestic problems, they cannot be solved.

Alleviating poverty and opening markets, increasing democracy, and, not the least of all, taking care of the environment—these issues need to be dealt with on behalf of each citizen in the United States, or in Norway, for the future of their own children, for their own health, for their own security.

*Q You noted the importance of enhanced educational status in the developing nations, and also in Eastern Europe. There are also major health status problems. What would your suggestions be in terms of how Western, democratic, developed nations might effectively pursue approaches to enhancing health and education status in these needy countries?*

"We live in an age where complicated issues are presented in 30-second sound bites. This tends to confuse people's willingness to concentrate on in-depth thinking about the future"

I think generally the political will or ability in the years after 1989-90 to invest and to support the Eastern European countries and Russia have not been sufficient. It would have taken a broader agreement in the West to go in with more resources, more people, and more willingness to invest and to aid these countries into economic progress and social purpose in a new situation, in what I would call a social market economy.

I think we have to be more forthcoming to the needs of the Eastern European countries and the previous Soviet Union because there is instability and it is a security risk to us if we do not help increase the confidence in democracy. And how do you do that without giving people the feeling that their lives become improved when democracy is introduced? That is a challenge, and education, health, and employment are the basics of that.

*Q There are few topics as contentious in the U.S. as taxes—green or otherwise. Can you point out some of the lessons Norway has learned for dealing with the unintended or undesired consequences of green taxes?*

It has not been easy. After our introduction of green taxes, the problem of competitiveness became acute for certain Norwegian industries because other countries reduced or at least did not increase their level of taxation in these areas. We had to back away from some of our initial goals.

But we have not abandoned our policy. We are going to stand on this policy, and we are fighting in Europe and other places to have others follow because we know it's the only way to have sustainable development, to have an energy mix which is wise, and to give the right incentives for using resources in a non-wasteful way.

*Q Democracy tends to work from crisis to crisis. What you're talking about are things that need to be done, but are a little bit ahead of a crisis. How do we create motivation in the political centers of this world?*

I see no other way but for us to reach out to the general community. This has become, in a sense, more difficult: we live in the age of television, an age where complicated issues are presented in 30-second sound bites. This tends to confuse people's willingness to concentrate on more in-depth thinking about their own society and about the future.

The media and the communications revolution makes us able to reach every person, all around the world. There is a potential for building democracy and purpose which is absolutely fantastic. But the way these things are driven by commercial interests—for issues that can "sell" at the moment—create a problem in long-term thinking, and in taking seriously some basic aspects of our own societies and our own future.

When people lose sight of the central issues, we—as politicians and as scientists—have to move out even more into those places where we meet them, not through the television screen but directly. Because it is when we answer questions, like you asked me now, in an audience where people see us talking, not in one-minute or half-minute sequences, but in paragraphs, that they can improve their own knowledge and thinking.

This is a new beginning for a new administration. There are many opportunities for positive change. As the President said in his inauguration speech, it is critical to explain the consequences of not making some bold decisions, and hope that four years from now people will see that those decisions were wise.