



WORKING TOGETHER FOR THE SAKE OF OUR PLANET

Photographs by Vyacheslav Bobkov and Alexander Kurbatov

This past January Moscow hosted the Global Forum on Environmental Protection and Development for Survival. It was attended by 1,000 political and religious figures from 83 countries. The participants attached special importance to this meeting in the land of *perestroika*. They hoped that the conference would make possible a major new step toward mutual understanding in the vitally important sphere of environmental protection. By all appearances, their hopes have been justified.

The Hour of Decision

President Gorbachev addressed the forum's participants on the last day of their work. This is an abridged version of the speech.

The five days that you have spent here in Moscow, your meaningful discussions, and the documents that you have adopted give me reason to say that an important step in molding humankind's ecological self-consciousness has been made.

And this is very important.

We have been aware of the threat of a military thermonuclear catastrophe for a while now. The scientists also made an invaluable contribution to this. International forces at all levels—political, diplomatic, and public—have already been mobilized to stave off this threat. We are witnessing the first results of this. But a second threat, the assessment of which was until recently clearly inadequate, considering its gravity—the threat to life on earth as a result of damage to the environment—has emerged.

Some of the great minds of the past foresaw the consequences of the thoughtless "conquering" of nature by humankind. They warned that our species could annihilate itself by destroying the plant and animal kingdoms and poisoning the soil, water, and air. At the end of the twentieth century, we have a very acute crisis in relations among the individual, society, and nature.

It is safe to say that the ecological imperative has forcefully entered the policy of states and people's everyday lives. It is becoming categorical, and not only because nature has suffered what is perhaps irreparable damage. The new scientific, technical, and technological revolution, all the consequences of which we do not know yet, can make this damage irreversible. We are not fatalists. But the hour of decision—the hour of historic choice—has come, and there is no reasonable alternative for humankind, because we are not predisposed to suicide. Humanity is a part of the single and integral biosphere.

I must admit that in the Soviet Union we have only recently come to understand the vital importance of the ecological problem to a proper extent at the level of policymaking. We were blinded by the threat of war. That is the main, but not the only, reason. After the Revolution, having started industrializing our country, we were not inclined to divert our attention to "secondary questions," as it seemed to us at that time. We were especially reluctant to spend our

limited funds on this. The size of our country and its riches encouraged us in our ecological carelessness.

Even when the pollution of the environment in some regions began to reach dangerous levels, this was not properly assessed at once. The credit for sounding the ecological alarm goes to our scientists, and the public followed them. Having changed the philosophical approaches to the problems of the development of society, *perestroika* has also altered our views on ecology. A detailed report on the national ecological situation, the first in the history of the Soviet state, has recently been published in our country. An unbiased analysis of our problems and dangers was made in this "green book." The pollution of the atmosphere in some large cities exceeds the admissible level. The state of our water resources spells grave consequences for our flora and fauna. Soils degrade, harm is being done to people's health, and the potential of future generations is being compromised.

In its resolution "On the Guidelines of Domestic and Foreign Policy of the USSR," the First Congress of People's Deputies envisaged a radical revision of our entire development, including our attitude toward nature. What do we mean by this?

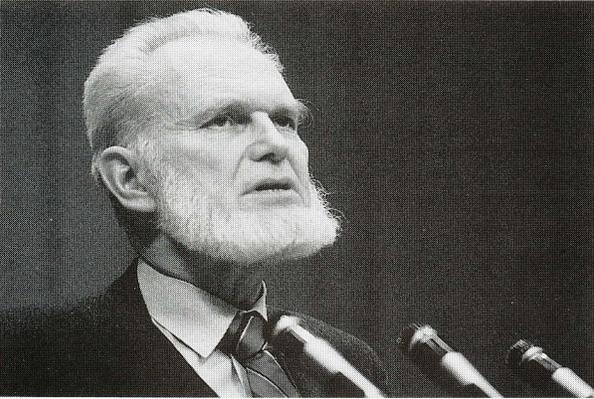
- A radical change in the character of production activity from the standpoint of its ecological consequences. We must take into account the ecological capacity of territories when planning the construction of economic complexes.

- Looking at the problem of consumption more rationally. People's living standards should not be raised by exhausting natural resources. This process should be accompanied by a restoration of the living conditions of the animal and plant world.



Mikhail Gorbachev talks with the participants in the conference.

Continued on page 61



Alexei Yablokov,
biologist, Deputy to
the USSR Supreme Soviet:

This forum was convened to attract the attention of millions of people to questions of the environment and global survival. Parliamentarians, community activists, and members of the clergy—people who have the strongest influence on worldwide public opinion—were invited.

I would have liked to say a quiet word of hope and consolation to my foreign colleagues at this forum, but this is not the time for such words. Slowly and inexorably, the world is coming closer to environmental disaster. Destructive human influences on the biosphere are stronger every passing year. The impending catastrophe haunts me.

Ecologically unsafe farming and other careless activities have already deprived the world of half of its arable lands. The total area of paved land equals the area of Europe.

Mother Nature is taking revenge on us for the violence we have done her. The concentration of lead in human blood exceeds the average of preceding centuries by several hundred times. Almost everyone on earth is affected to one degree or another by pesticides and other harmful substances, which we get with our food. In my country, for instance, more than 30 per cent of tested foodstuffs revealed dangerous concentrations of such substances. Unborn babies are exposed to the poisons in their mothers' blood. A woman breast-feeding her child gives it poison along with her milk. I

Global Forum on Environmental Protection and Development for Survival.



Albert Gore, Jr.,
United States Senator
from Tennessee:

am sure that the effects of this will tell on many generations to come.

My good friend Carl Sagan has spoken and written about the ominous changes that are taking place in the world's climate. I not only share his anxiety but see an even greater danger in the situation. What worries him most are the mineral fuels that are being combusted in huge quantities all over the world. I see other destructive factors too, such as the large-scale farming of virgin lands, with the attendant microbiological damage to the soil. Logging is being done on a disastrous scale. The permafrost is thawing in arctic areas. In fact, every country is doing its dirty bit to upset the world's climate and to damage the environment. We all share the responsibility here. The world can now be described as the United Polluted States, at war with nature.

Several years ago, Ronald Reagan, then President of the United States, said that his country would join forces with the Soviet Union if, for instance, beings from another planet attacked Earth. It was well said, but I don't think we ought to wait for extraterrestrial dangers to join hands. The danger threatens the global environment. The time has come for the Soviet Union and the United States to teach their industrialists and politicians to exercise some environmental circumspection.

Let's get to work right now! Tomorrow may be too late.

All around us, old forms of organization and old conventions of thinking about the world are undergoing radical change. Millions of people are at this moment engaged in a great struggle to redefine the relationship between the individual citizen and the state. Leaders of great governments are in the midst of an effort to redefine the very basis for the conduct of international affairs. And both the people and their leaders are awakening to the urgent need for a fundamental revision in the relationship between the human species and the rest of the natural world.

It is this latter purpose that brings us all here. This is an assembly of those who are among the first to assert that the search for new thinking must extend beyond society to the global environment. We have come to realize that we are in the midst of an ecological crisis, on a scale unlike anything the world has yet seen.

When you consider the relationship of the human species to the planet Earth, not much change is visible in a single year, in a single nation. But if you look at the pattern of that relationship from the beginning of the modern era until today, the contrast is stark. Seen in historical perspective, it is clear that dozens of destructive effects have followed the same pattern of unprecedented acceleration in the latter half of the twentieth century.

We need a second Green Revolu-

tion, focused on increasing the productivity of small farms on marginal land with low-input agricultural methods, and on resolving the problems created by policies of governments around the world that lead farmers to undervalue the soil, water, and genetic diversity on which food production depends. In many ways, however, the real challenge will be in developing policies and institutions that will encourage farmers throughout the world to adopt these new technologies and practices. Nor will technology alone completely solve the problems that arise from inadequate distribution of food supplies, which are more often attributable to a failure of politics than of crops.

At the international level, however, if this process of debate becomes one of accusations and re-primations, we will go nowhere. We must begin anew, first by agreeing on the problems we face, then by deciding together on the requirements for dealing with them, and finally by working jointly to gather the resources that are needed. Moreover, in this discussion, nations must concentrate on identifying their own responsibilities and on defining what it is that they would wish to do in order to deal with them. We must avoid the trap of pointing out only what others have done wrong and what others owe the process of correction. And above all, we must avoid the ultimate trap, which is to hold the global environment itself hostage to our disagreements—demanding satisfaction on narrow matters while withholding agreement on things that are absolutely necessary.

We can only conclude that the environmental crisis is not merely material but spiritual in nature. The adaptation that modern civilization must make, therefore, should be guided not only by specialists, by heads of state, or by lawmakers: It must also be a product of individual insight and inspiration. Human survival demands a new way of thinking. This event and others like it in the months to come, may—if our hopes are realized—mark the birth of that new way of thinking. Let us strive to make it so.



Nikolai Vorontsov, chairman
of the USSR State Committee
for Nature Protection:

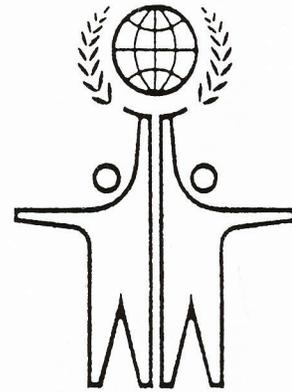
The world is reappraising its values. I've been aware of this process for several years, and this forum has proved it once again.

An anthropocentric ideology predominated in the world for 25 centuries or more. This ideology presented humankind as the center of the universe. It had much in common with today's technocratic mentality, which is ready to satisfy human needs no matter what the cost.

Now, with our deplorable experience of the humankind-nature confrontation, it has at last occurred to humanity that our planet's biosphere is a dense network of interrelations. When we violate the environment in one location, there are repercussions in other places, often great distances away, and the whole world suffers.

So ecology has rapidly acquired a prestige unheard of for such a young science. Millions of people have pinned their hopes on it, as the Moscow forum has clearly demonstrated. But it will still require a team effort to raise in people an awareness of environmental concerns.

In this respect, my country has something to be proud of. Russia set up the world's first nature preserves about a hundred years ago. Russia was home to several great ecology pioneers: Vladimir Vernadsky, Heinrich Hauser, and Pyotr Semyonov-Tian-Shansky. From the 1920s to the 1940s, Soviet ecology reached such heights that American histori-



ans of science write theses and monographs about it to this day. In 1988 Professor Douglas Wiener of the University of Arizona wrote a book on Soviet nature protection in the 1920s that reintroduced us to our own forgotten compatriot, Vladimir Stanchinsky, the trailblazing theorist of nature protection.

Now that Soviet ecology has revived, we have to start from scratch after all the years of stagnation and reaction. The State Committee for Nature Protection, which I have the honor to head, was recently created to coordinate this vital work. But I am a scientist, and it is my deep conviction that to protect nature, we need in-depth research more than any offices, however efficient. We need pure science even more than research and development in ecologically safe technologies, water-purification systems, and other applied research. Breakthroughs in zoology, genetics, and general biology are vital.

I was born an optimist, and I believe that we will do away with the technocratic approach to nature protection that still holds sway. We have to replace it with an ecological approach and protect not only water, air, and soil but all living communities that account for environmental survival—communities consisting of landscapes, the riches hidden underground, wildlife, and domesticated flora and fauna. Humanity is doomed unless these communities survive. If we don't rescue them, future generations may be subjected to unimaginable genetic damage. Even national efforts will not be enough to prevent it—the entire international community must work together toward this goal. That's what makes meetings like this forum so important. ◀



Carl Sagan,
professor of astronomy,
Cornell University:

The earth is the birthplace of our species and, as far as we know, our only home. When our numbers were small and our technology feeble, we were powerless to influence the environment of our world. But today, suddenly, almost without anyone noticing, our numbers have become immense, and our technology has achieved vast, even awesome, powers. We are now able to make devastating changes in the global environment—an environment to which the beings that inhabit the earth are exquisitely adapted.

We are now threatened by self-inflicted, swiftly moving environmental alterations about whose long-term biological and ecological consequences we are still painfully ignorant—depletion of the protective ozone layer; a global warming unprecedented in the last 150 millions; the obliteration of an acre of forest every second; the rapid extinction of species; and the prospect of a global nuclear war that would endanger most people on earth.

By their very nature these assaults on the environment were not caused by any one political group or any one generation. Intrinsicly they are transnational, transgenerational, and transideological. So are all of the conceivable solutions.

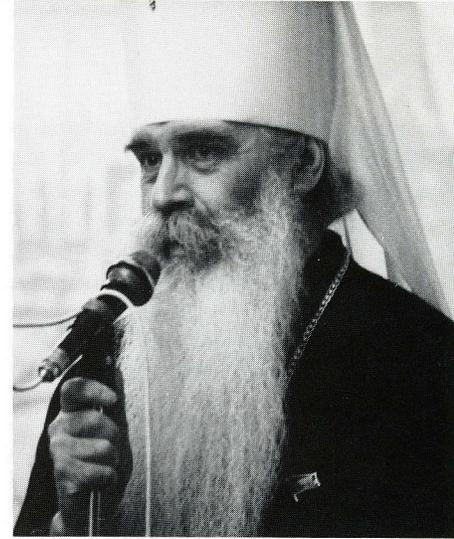
Problems of such magnitude and solutions demanding so broad a per-

spective must be recognized from the outset as having a religious as well as a scientific dimension. Mindful of our common responsibility, we urgently appeal to the world religious community to commit itself to preserving the environment.

The environmental crisis requires radical changes not only in public policy but also in individual behavior. History clearly shows that religious teaching, example, and leadership are powerful influences on personal conduct and commitment.

As scientists, many of us have had profound experiences of awe and reverence before the universe. We understand that what is regarded as sacred is more likely to be treated with care and respect. Our planet should be so regarded. Efforts to safeguard and cherish the environment need to be infused with a vision of the sacred. At the same time, we need a much wider and deeper understanding of science and technology. If we do not understand the problem, it is unlikely we will be able to fix it. Thus, there is a vital role for both religion and science.

We know that the well-being of our planetary environment is already a source of profound concern in religious councils. We hope this appeal will encourage a spirit of common cause and joint action to help preserve the earth.



Pitirim, Metropolitan of
Volokolamsk and Yuriev,
People's Deputy of the USSR:

We've all had enough experience and to spare of international conferences—they're usually noisy affairs. This one is different. Never before has the voice of conscience been heard so well as it has here. Conscience is a mighty force. You cannot kill it, and it retains its precious value forever.

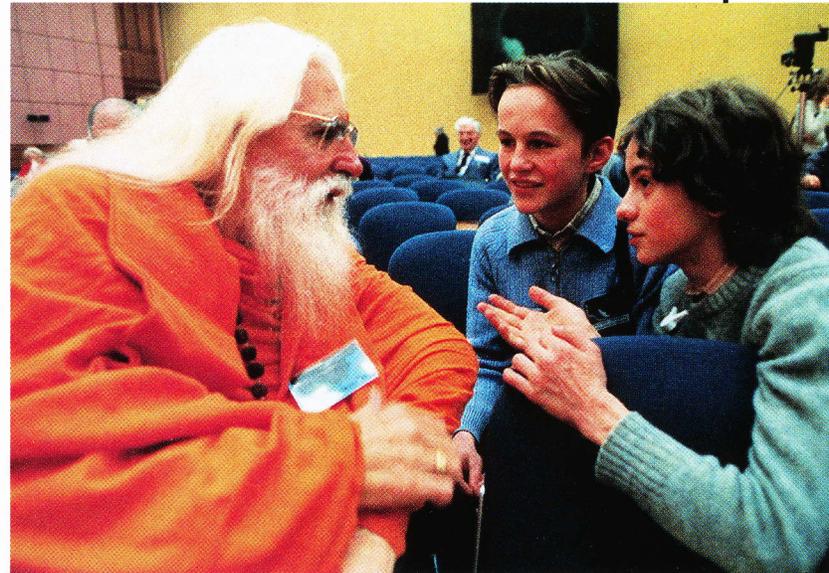
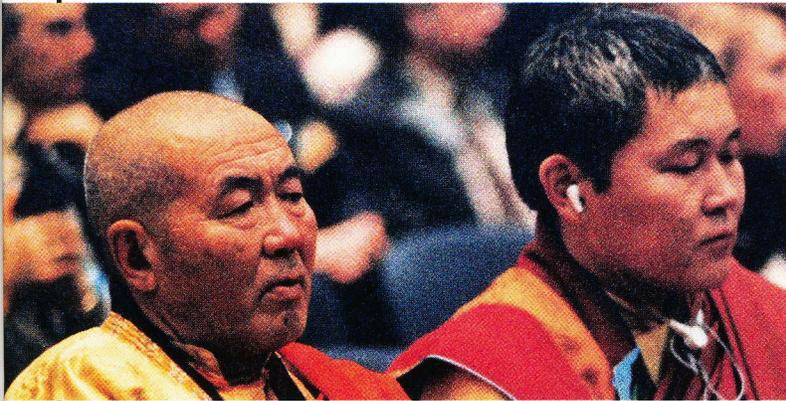
We have all gathered in Moscow to call worldwide attention to the innumerable disasters that we humans have caused the earth with our activities. Until quite recently, we saw nature as a slave to our selfish desires. We started by killing animals and finished by inventing horrible weapons, capable of killing not only all of us but every living thing on earth.

We face a deadly threat. We face fratricidal wars and conflicts. The time has come to stop and reflect that in a decade we will cross the threshold into the third millennium A.D. Civilization is old enough to have brought forth wonders. What has it actually done? What do we have to offer the future?

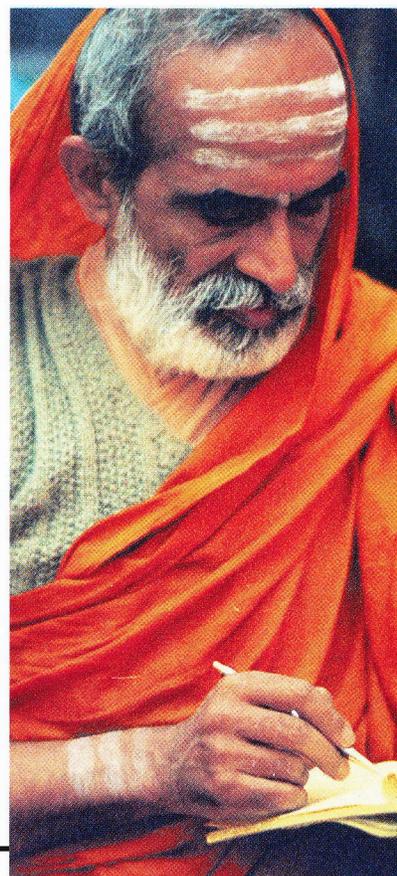
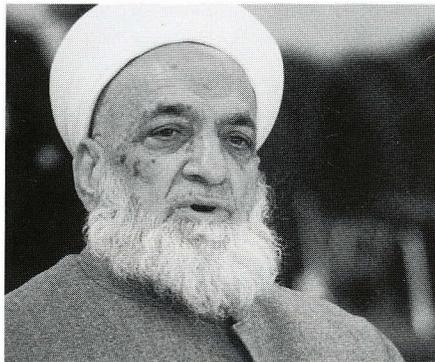
Yes, we really need to stop and think. We have already crossed the border beyond which the thoughtless exploitation of nature brings irrevocable disaster. Only conscience can set our reason right and bring salvation to humanity. The Church has no weapon but conscience. ■



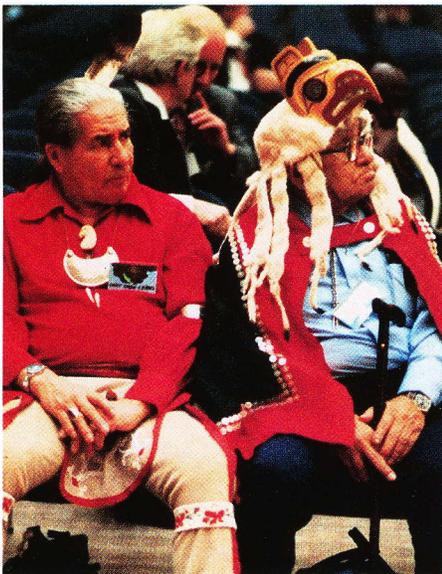
Javier Pérez de Cuéllar, United Nations Secretary General, was the forum's honorary guest.



Syria's Grand Mufti Ahmad Kuftaro (right) cochaired the forum. Above: Soviet Buddhists Zhigitov Zolto (left) and Rinchip Dagva.



His Eminence Gurudewa Sivaya Subramuniasuami, president of the Himalayan Academy, talks to Moscow students during a break. Left: A participant from India.



Japanese priest Fuji (above). A delegation of Native Americans (right).