## Speaker's Remarks Norman Myers

Any highly idealistic and inspiring statements have been made today, with which I fully agree. Supposing I was a World Bank staffer, how would I translate that into what I do in my Monday morning world? The sort of challenges that the World Bank staffer has to grapple with is the main reason why we do not have a better world, one which reflects some of the values that are being expounded here this morning.

There are various institutional roadblocks. I am going to be pragmatic here, not wanting to compete with others in moral analysis, but I do want you to join me in asking a difficult question. Why is it that when we know our world is out of joint, and we know on the whole where we should be going, we know the shape of that shining citadel on the hilltop, and we have the architectural plans, and we know there are plenty of bricks waiting, why do we not do it?

About two years ago I was on a cruise ship in the eastern Mediterranean. It was a trip organized by the Eastern Orthodox Church, with the support of the Vatican, the Church of England, and many other religious bodies. About 50 environmentalists were there. The purpose of that symposium was, the churches said, to try to conjoin the views of environmentalists and religious people. And the outcome of that week-long conference was a statement by those churches saying that we should expand our view of sin beyond what we do to our fellow humans, to include our fellow creatures. A very fine thought, though I did ask myself how a saint with the flu would view this attitude toward all of our fellow creatures. In the two years since that cruise the amount of pragmatic action on these sentiments has been just about nil, because it is very tough. On another occasion I was at the Vatican, at a meeting of the Pontifical Academy of Sciences, and one afternoon His Holiness the Pope came to join us. He was commenting on the World Bank and the United Nations agencies and wondering why, with the high quality of the staff (although the corridors are not full of saints and angels as yet) the Bank did not express more of the views of the Vatican and the Catholic Church and similar minded folk. Thinking on this, I asked myself why we do not change gear, get the brakes off, and head toward the promised land. And I want to suggest to you that it is an institutional fact it is not that people are individually invidious or mean or selfish or shortsighted and all those other things, but it is an institutional problem. And especially a problem with---dare I say itthe economics profession.

I would like to emphasize that I have partial training as an economist, and I think economics has contributed a very great deal. But it cannot tell the entire story. For example: leading economists in agriculture often assert that there is no food problem in the world. If there were a problem, they say, we would instantly see it reflected in rising food prices. Food would be viewed as scarce. We would see prices climbing through the ceiling. But on the contrary, we are seeing prices going down. From this it could be concluded that everybody on Earth is fine as concerns the supper table. What rubbish! The best part of 800 million people, maybe a billion, go to bed hungry every night. They are part of the 1.3 billion poorest of the poor in this world who have a cash income of one dollar a day, at most. How can these people express their opinion in the marketplace? How can they demonstrate their hunger, their need for more basic food in such a way that the message gets through to the economists, who say: if there were a shortage of food, we would see rising food prices? Those people on a dollar a day or less are disenfranchised socially, politically, economically, and nutritionally. Their voice remains unheard because of the economic models that we think drive the world. That is my first point: that economics, while contributing a very great deal, is deficient in certain respects.

Another deficiency of economics is in its love for quantification. Some practitioners seem rather seduced by their love for numbers and figures, getting so carried away by what can be counted that they loose sight of what also counts, or what truly counts. Consider the argument about the value of a species. Is a species not unique and therefore beyond value? Well, one can argue that for sure. This country is investing US\$15 million in saving the California condor. This is enough money, because the bird is being saved, and it works out at just a few cents per taxpayer, an insignificant amount. Suppose it was US\$50 million and not US\$15 million. Or suppose it was US\$50 billion. If I was an American taxpayer, I would object to contributing my share of US\$50 billion. So there are limits, species are not beyond value.

We must take this discussion beyond individual species, because we are well into the opening phase of a major extinction of species; within our lifetime we could witness the demise of between one-third and two-thirds of all species that share the planet with us. Now this is different from all our other environmental problems, because it is intrinsically irreversible once a species is gone, that is final. Soil erosion? Given a century, we could fix that problem. Acid rain and other forms of pollution? We could clean that up in a few decades if we wanted to spend the money. We could replant the forest, we could drive back the deserts, we could repair the ozone hole. We could do all these things within a century or two at most. Mass extinction of species is quite different from all of these because of the long-term factor. True, it is not permanent to the extent that evolution can one day repair the damage. But that one day is a long way away. We know from mass extinctions in the past that the recovery period is going to be at least 5 million years. And what we do or do not do in just the next few decades will determine whether people in the future, those coming after us, will live in a world which is grossly impoverished because it has lost a large share of its species.

Now 5 million years is a long time—it is 20 times longer than humans have been a species themselves. How many people will be affected by living in this impoverished world? If the average human population during those 5 million years is not the 6 billion we have on Earth today, I believe that is too many. If it is 2.5 billion, over 5 million years, then we are talking about 500 trillion people. This is *10,000 times* more people than have ever existed. These are the people who are going to be either impoverished by what we have failed to do in the next few decades, or are going to live in a world with a largely intact biodiversity because we take action.

Now in the face of a problem of these dimensions I believe that economics has nothing to say, and ethics has everything to say. This is a moral imperative. Do we consider the significance of this decision that we are implicitly talking today on the unconsulted behalf of the 200,000 generations that will come after us? Is this not the biggest decision that has ever been taken by one society on the unconsulted behalf of all those societies still to come? The only answer here is a moral imperative. It is a very tough one. How much are we prepared to give up today in order to benefit people for the next 5 million years? This is very difficult. If we fail, I believe that within 30 or 40 years people will be quite justified in blaming this generation for not taking action to prevent mass extinctions. We have all the information we need to know that action must be taken or Earth will be living with the consequences for 5 million years. And if the answer is that our discount models do not quite fit a five trillion-year time horizon, then this will be considered a completely inadequate answer. We need to find a better answer.

There is another area in which our economic model fails us because it is incomplete. This relates to population and consumption. For example, let us compare Britain with Bangladesh. Britain is quite often critical of Bangladesh and asks why it does not implement its population program more vigorously and urgently. Bangladesh could equally ask why Britain has no population policy at all. Britain has never even discussed such a policy on the grounds that it has no significant population growth. Britain produces only an extra 100,000 people per year, whereas Bangladesh produces something over 2 million extra people per year. This statement does not take into consideration the fact that every extra person in Britain will utilize 30 times more fossil fuels than the new arrival in Bangladesh. Hence the population growth in Britain has more capacity to damage the global climate-everybody's climate-including Bangladesh and Brazil and the penguins at the South Pole, than the 2 million extra people in Bangladesh. In this light maybe Britain does have a population problem, and yet we have never asked ourselves how many people are good for Britain, how many Britons are good for the world. Ironically we could reduce population growth to zero in Britain by the simple expedient of eliminating half of all unwanted births. That would be a win-win situation. It would help the parents, it would help the children, it would help the families, and it would help the treasury. We would come out ahead on many fronts, and yet we still like to call ourselves in Britain a developed country.

Moving on to a final point, I was talking about the institutional barriers that lie in the track in our road between where we are now and that shining citadel on the hilltop. I want to consider the question of subsidies. I believe that this flies right to the heart of these issues. A study of subsidies around the world in the six leading areas of agriculture, fossil fuels, road transportation, water, forests, and fisheries reveals some extraordinary situations. Unbelievably, in Germany, another country that likes to call itself developed, it would be economically efficient to close down all the coal mines and send the miners home on full pay for the rest of their lives. Germany would also gain environmentally because there would be a reduction in acid rain, urban smog, global warming, and so on. It is another win-win situation. There are many other instances.

At the Cairo population conference four years ago the gardens of the conference center were watered at noon when the temperature was at least 32 degrees centigrade. Almost all of that water immediately evaporated. Despite the crucial role of water in Egypt, the government wastes water because of all the subsidies for water. The water managers are not to be blamed, for they are listening to the signals sent to them by the marketplace, which has been distorted by the subsidies-which imply that water is not a valuable resource. In Central Valley, California, a desert is growing alfalfa, rice, and other crops. Here the gigantic water sprinklers operate at midday, when the temperature is 38 degrees centigrade, just like in Cairo. All that water is being wasted because the message through the subsidies is that water is so cheap you can waste it.

The combined total of all these subsidies worldwide is about US\$1.9 trillion, so they exert great leverage in a global economy of US\$28 trillion. Of those US\$1.9 trillion of subsidies, US\$1.5 trillion can be characterized as perverse subsidies. These are subsidies that are bad news for both the economy and the environment in the long run. If we get rid of them we shall advance on both fronts. There are many examples of perverse subsidies in agriculture and road transportation, which are as equally absurd and ridiculous as the coal mining example in Germany.

Because they are bad for both the economy and the environment, these are funds going into unsustainable development. The budget proposed at the Rio Earth Summit for sustainable development was US\$600 billion, and governments of the world laughed at the idea, claiming they could not countenance finding such a huge sum. Yet in these perverse subsidies they would find twice as much money. The Agenda 21 budget could be financed immediately, and governments would have enough money left over to cancel their budgetary deficits. They could declare a national holiday, a huge nationwide party, and still have money left over. It is perhaps the mark of a moral person working in the development field to look out for boring things like subsidies, which are the big road blocks on the way from where we are now to the shining citadel on the hill top.

Finally, what shall be our criterion, our ultimate benchmark, by which we measure the value and productivity of what we do? The economists have always said, with good reason, that there is only one ultimate criterion, and that is what contributes to the welfare of human beings, keeps them fed, healthy, educated, employed, and so on. And for a very long time, until very recently, there has been an awful lot of sense to that. "The proper measure of man is man," said Alexander Pope. But we have now reached a stage where the environmental crunch is so severe and so urgent that we should shift our focus. Instead of saying, as we have done, that the main focus of our attention would be to mobilize the resources of Earth in support of the human cause, it should move beyond that, and we should now mobilize the resources of humans in support of Earth's cause, the environmental cause, our life support systems. This would give us our best, and maybe our only, long-term chance of achieving that welfare which the economists are looking for.

If we place Earth at the center of our attention, then human needs will be provided for. I believe that this leap of perception and understanding is one of the biggest moral challenges since we came out of the caves, to recognize that humans are not the center of all creation, but that our Earth deserves a place in our thinking, right alongside, and each will support the other. So this is the moral challenge, and it is very challenging. How many of us already behave in our daily lives in that sense? It is a challenge that we must take on or find ourselves in a corner. I think it is a very exciting prospect ahead for us.