Global 2000 Revisited: What Shall We Do?

A plenary presentation to the Parliament of the World’s Religions, Chicago, 29 August 1993

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Holinesses, Excellences, Venerable spiritual leaders, ladies, and gentlemen: warm greetings from the Trustees and staff of the Millennium Institute†. We are delighted to be with you at the 1993 Parliament of the World’s Religions.

Let me begin by introducing my team. My co-authors are Jane Blewett, Executive Director of the Earth Community Center, and Kristen Barney, Research Associate and Corporate Secretary of the Millennium Institute.

Four of the Millennium Institute’s nine Trustees are here:

**Mr. Peter Aykroyd**, our Chair, is the author of a new book entitled, “The Anniversary Compulsion”. He is also a retired Assistant Deputy Minister of Transport Canada.

**Dr. Katherine Esty**, Our Vice Chair, is President of Ibis Consulting Group in Cambridge, Massachusetts.

**Mr. Alan Pilkington** is Managing Director of DDB Needham Worldwide Advertising here in Chicago.

**Dr. Daniel Gómez-Ibáñez**, is known to all of you as Executive Director of the Council for a Parliament of the World’s Religions.

We are here because we sense that Earth and her people are in serious trouble, trouble *that is as* threatening to life as a nuclear war. The origin of the trouble, we feel, is fundamentally spiritual, so we thank the Trustees of the Council for a Parliament of the World’s Religions for the opportunity to describe the critical issues of the 21st century and to hear your wisdom on our question: What *shall* we do?

* In 1993, Dr. Barney was president of Millennium institute; [http://www.millennium-institute.org/](http://www.millennium-institute.org/). He is now Chair, Our Task, Inc. [www.OurTask.org](http://www.OurTask.org); P.O. Box 17076, Arlington, VA 22212, USA.

Here is the book we have prepared for you.‡ We have used the best available international data to analyze future developments in what has come to be called the “Global Problematique”, which is the human mega-problem of the 21st century and third millennium. The Global Problematique is so large that poverty resources, population, pollution, hatred, and war are only modest, interrelated sub-parts.

The book is modeled after the original Global 2000 Report to the President§ that I directed for President Jimmy Carter and published in 1980. The new book is different, however, because it is addressed specifically to you, the world’s spiritual leaders.

Now, let me give you an outline for my talk. I will begin by describing the scientific facts of the Global Problematique. I will then explain why the Global Problematique is primarily a spiritual problem, and I will ask you four spiritual questions that are at the core of the Global Problematique. Finally, I will ask you to help.

Since the Global Problematique consists of a large number of interrelated problems, we could begin with any of them. I am going to begin with a problem of concern to all of us—meeting basic human needs in the 21st century. To do this, we must first reflect on how many of us humans there will be here on Earth in the 21st century.

![Human Population Graph]

This slide plots human population for the period 1600 to 2200, the standard scale that will be used on most of my graphs. These six hundred years span the period during which human activity has had and will have the greatest impact on Earth.

Note the shaded bar representing the lifetime of a child born today. It appears on each graph, and as you will see, our children must expect many changes during their lifetime.

We adults have seen change too. During our lifetimes, human numbers more than doubled from about 2.5 billion to a soon-to-be 6 billion.

Approximately a fifth of the world’s people live in the “developed” countries of the so-called “North” where over consumption and waste are serious. Approximately four-fifths of the world’s people live in the “developing” countries of the so-called “South” where there is still rapid population growth.

The future portion of this curve is based on a United Nations’ projection that assumes, hypothetically, that birth rates and death rates both remain “frozen” at today’s levels. Under such a scenario, our children could live to see human numbers approach 25 billion. Wherever there is now one person, there would be four.

Could so many people grow the food they will need? Is there enough land? Currently about a quarter hectare—which is equal to a little more than half an acre—is needed on average to feed one person, so if we multiply each point on the population curve by a quarter hectare, we will have a plot of the land needed to feed the human population—at current agricultural yields and if current birth and death rates remain unchanged.

Here, the rising curve shows the land needed to feed us humans. The straight line marks the total amount of land on Earth that could possibly be used to grow food: it totals 3.3 billion hectares. The downward sloping line represents losses of land.

The curve representing the land needed is shown crossing the line representing the land available. This, of course, is impossible. Before these two curves cross, living conditions will deteriorate so much that deaths will stop population growth. Even the approach of these two curves to each other implies enormous tragedy and suffering.

Currently, however, these curves are approaching each other at a frightening speed. Already our television screens and our newspapers regularly report examples of local areas where people’s need for land has exceeded the land available to them. The first to die are the young, the old, and the poor.
A child born today will live to see the need for land approach the maximum land available. The task of our generation is to find ways to keep these two curves from colliding.

We have three options: We can stop population growth; we can reduce soil losses; and we can increase “agricultural yields”, that is, the amount of food grown on a given piece of land.

Let me discuss first option 1, stopping population growth.

If population is to stop growing, the number of births and deaths must become equal. This can happen either with both births and deaths at a high level—which is not an attractive possibility—or with both births and deaths at a low level. If we humans want a future in which we enjoy the benefits of long lives and low numbers of deaths, the norm of human reproductive behavior everywhere must become two children—or less—per couple.

The United Nations has developed another demographic projection in which it is assumed, hypothetically, that fertility declines rapidly and population growth ultimately stops. This alternative projection is illustrated here in terms of the annual increment to the world’s population.

A record 90 million people are now added to the human population each year—roughly the equivalent of adding the whole population of a medium-sized country every year. This annual increment is an indicator of the additional people for whom food, shelter, schools, and jobs are needed each year.

According to this UN projection, the annual increment to the population will continue to rise to record heights for another few years. Then it will peak sharply at about 100 million per year in 2000, and fall by more than half within the lifetime of today’s children. Ultimately the world population would stabilize at about 12 billion people.
The UN report does not discuss what social, economic, and religious changes would be necessary to achieve this projection, but let me mention a few.

People often think first of contraceptives and family planning, and although access to family planning is necessary, it is not sufficient. People do not use contraceptives unless they want fewer children, and huge numbers of people still want more than 2 children. We must, therefore, think about why people want so many children.

One reason is that people everywhere want heirs, and when infant mortality rates are high, they want large numbers of children to assure some will survive to become heirs. So, if couples are to be content with only 2 children, we must reduce infant mortality rates, which in turn, require improvement in infant and maternal health.

In many countries children cost parents little or nothing for education and health services, but give the parents free labor and old age security, so parents want the economic benefits of large numbers of children—especially boys. If couples are to be content with 2 children, child labor laws, educational and health financing, and-old age security programs must change.

There are cultural problems, too. In some cultures men are not respected by other men unless they keep their wives pregnant. In threatened, minority cultures, it is often the patriotic duty of every couple to produce as many children as possible to fight the oppressors. These factors must change, too.

Educating young women and giving them meaningful, fulfilling roles beyond motherhood are highly effective ways to reduce desired family size, but in some cultures and religions women are considered inferior to men and are not educated. In some places, female babies may even be killed.

This slide shows a woman and her twins, a boy and a girl. The woman’s mother-in-law told her that her breast milk was not enough for two babies, and that she should breast feed her son and give her daughter a bottle—when she could afford it. As you can see, the boy is fat and healthy, while the girl is starving. In fact, the girl died a few days after this photograph was taken.
The woman now regrets that she did not feed her boy and girl equally, and she asks other mothers not to let their daughters die.

As these examples illustrate, stopping population growth requires major economic, cultural, political, legal, and religious changes. Without these changes, the UN projection of lower birth rates and a stabilized population is only wishful thinking. And even with such changes, we must expect another doubling of the world’s population to 12 billion.

If we can stop population growth at no more than 12 billion people, will we be able to feed everyone?

This slide shows the land that would be required. The land needed rises with the population and levels off at 3.1 billion hectares, which is the amount of land needed to feed 12 billion people at current yields. On a global scale, the land currently under cultivation totals about 1.4 billion hectares, which is about half of the total land available.
Much of the remaining, less productive land, however, is already being grazed by livestock.

Additions to the world’s stock of agricultural land have slowed dramatically over the last several decades. The economic cost of bringing additional land into production is now high relative to the income that can be produced from farming the land. The ecological cost is also high, and an effort to bring 3 billion hectares under cultivation implies an enormous loss of habitat for many species.

There are also pressures for competing uses of land for non-agricultural purposes. Some sense of the magnitude of the pressures for non-agricultural purposes can be gained from the fact that for human numbers to reach 12 billion we would be adding another 6 billion people. If 6 billion additional people were evenly distributed over the whole habitable Earth, every continent would be populated to the density of some of the most populous countries today.

In short, we do not have the land needed to feed 12 billion people at current agricultural yields. If we are to meet basic needs for everyone, we must not only stop population growth, but also utilize our other two options: preserving arable land and increasing agricultural yields.

Given how closely the human future is linked to the future of soils, alarmingly little is being done to monitor soil losses and deterioration. Nonetheless, we know from even the limited data available that all over the world land is being lost at unsustainable rates through erosion, desertification, expanding urban areas, depletion of ground water, salinization, and water logging.

Some perspective on the global pressures on agricultural land comes from trends in per capita cropped land. At the global level, cropped area per capita has declined steadily from roughly half a hectare per capita in the 1950s to less than a third of a hectare in the late 1980s.
For the future, we can say this: if land losses due to non-agricultural uses and to land deterioration can be limited to about fifteen percent of the total arable land, there might ultimately be about 2.8 billion hectares of potentially arable land. Since this is significantly less that the land we would need at present yields to feed 12 billion people, we must increase yields.

Prior to this century almost all of the increase in food production was obtained by bringing new land into production. That is no longer possible. By the first decade of the next century, almost all of the increases in food production must come from increased output per hectare—that is, from higher yields—rather than from increases in land under cultivation.

The effects that increasing agricultural yields have on meeting basic human food needs are shown in this slide. At current yields about 1.5 billion hectares are needed to feed the human population. If yields were somehow to be doubled, only half as much land would be needed, so doubling yields moves each point on the curve down by half. Quadrupling yields would move the curve down by three quarters. Doubling and quadrupling shifts the curve over and lowers the plateau level. A major human goal must be to find ways to increase agricultural yields enough to bring the plateau level down to well below the curve of land available.
The history of yield increases and a projection for the future is shown on this slide. Yields increased relatively slowly until the middle of this century when the widespread use of fertilizers, pesticides, and irrigation and the commercial application of plant breeding techniques initiated the so-called “Green Revolution”. As a result of the Green Revolution, yields have increased at more than 2 percent per year since the middle of this century. Also, the prices of many agricultural commodities—including such staples as wheat and rice—have declined in real terms.

While these trends seem reassuring, a deeper look raises many concerns. The high-input methods of Green Revolution agriculture have created unsustainable resource and environmental problems including:

- Surface and underground water pollution from chemicals and animal waste,
- Erosion and compaction of soils,
- Dependence on fossil fuels,
- Depletion of underground water deposits, and
- Worker and community health problems.

In spite of these problems, the primary source of growth in agricultural yields for the next century will be to continue applying the conventional techniques of the Green Revolution more widely throughout the world. But, the benefits that can be derived from conventional techniques are limited. In particular, the incremental response to fertilizer, pesticides, and other inputs is declining while environmental problems are increasing. By the second decade of the next century, conventional techniques will be inadequate to sustain the needed yield increases.

Advances in non-conventional methods—“genetic engineering”—have possibilities for increasing yields later in the next century, but their successful utilization requires farmers to have much higher levels of scientific skills. These skills will be difficult to achieve in the developing countries of the South where increased yields are critical. It seems likely
that global gains from “genetic engineering” will not occur until well into the 21st century, and even then will be less than once anticipated.

Even non-conventional techniques may not achieve what is needed because they depend on three factors that are being constrained: genetic resources, fossil fuels, and environmental conditions. Consider first genetic resources.

All methods of increasing agricultural yields are essentially “tinkering” with Earth’s ecosystem. The objective of the tinkering is to allow our human species to utilize a larger fraction of the net photosynthetic biomass of Earth and to reduce the fraction available to the other species, especially the ones we call “pests” and “weeds”.

The great American naturalist Aldo Leopold once said, “The first rule of intelligent tinkering is to save all the pieces”. We are not following Leopold’s rule as we tinker with Earth’s ecosystem. We are not saving all the pieces. We are throwing away species left and right, as illustrated in the next slide.

Currently we are causing 30 to 40 extinctions per day, and by early in the 21st century, we will be destroying species forever at a rate of hundreds per day.

Species are valuable for many reasons. Some reasons are aesthetic and spiritual. Children born today will have no opportunity to see or be inspired by a third of the species that were here during the lives of their grandparents. Here are photographs of three endangered species, a flower, a fish, and a cactus.
This is a great aesthetic and spiritual loss for our children and their children.

Species are also valuable for pragmatic reasons. Both conventional and high-tech methods of increasing yields for crop plants require genetic diversity in the breeding stock. But the wild strains of crop plants on which plant breeders depend will largely be lost over the next few decades as marginal land is brought into cultivation and as urban areas expand into previously wild habitat. This massive loss of genetic resources is one of the reasons we must not overestimate the possibilities for increasing yields, even through genetic engineering techniques.

A second constraint on yield increase involves our supplies of fossil fuels, especially petroleum.

Too few people know that high-input, high-yield agricultural methods have changed agriculture fundamentally. Years ago, agriculture was a means of capturing solar energy in the form of edible food calories. This is no longer true. Under high-tech, high-input agriculture, solar energy has become a catalyst for transmuting fossil fuels into edible food calories.

The trend toward agricultural dependence on fossil fuels is shown in this slide. With the introduction of mechanization in the 1800s and the Green Revolution in the mid-1950s, fossil fuel inputs to agriculture began to soar. These fossil fuel inputs are for pesticides, fertilizers, tractor and truck fuel, irrigation energy, and crop drying.
At lunch today many of us ate some bread. The bread we ate contained roughly 6 calories of fossil fuel for every calorie of solar energy. If you ate steak or roast beef, it contained about 8 or 10 calories of fossil fuels for every calorie of solar energy.

Since the world’s food supply is now linked directly to the future availability of fossil fuels, we must make a brief digression and look into the future availability of energy, especially petroleum.

Much is known about the future availability of oil. Petroleum geologists have determined by four independent methods that there were 2,000 billion barrels of oil in Earth when we first started using it in 1900. This is all the oil we have ever had or will have.

This slide shows what we might call “Earth’s fuel tank” in its initial full condition with 2,000 billion barrels of oil. The width of the various compartments indicates the initial petroleum resource in various parts of the world.

Since 1900, oil has been drawn steadily from Earth’s fuel tank to power industrialization. If we continue using oil at current rates until 2010, look how much will have been drained.
By 2010 approximately half of the oil remaining will be in the Middle East, and the ability of the world’s energy market to stabilize the price and supply of oil will be substantially reduced.

This all means that within the lifetime of a child born today, virtually all of Earth’s petroleum will be burned, and Earth’s fuel tank will have gone from full to empty. An inevitable decline in the use of petroleum will begin about 2030. If we leveled off our use of oil at the current rate, it would be possible to delay the fall-off in oil use for perhaps ten or fifteen years, but there will never again be large increases in the availability of petroleum.

The depletion of the global petroleum resource does not imply a global economic disaster if some other form of energy replaces fluid-fuels at comparable prices and without creating serious environmental problems. Although there are large coal reserves around the world, the pollution produced from burning this coal would be unacceptable.
Converting the coal to synthetic fluid fuels (oil or gas) before burning would reduce some pollutants but increase others, especially carbon dioxide. Nuclear, solar, wind, and thermal power can produce electricity, but cannot produce efficiently the fluid fuels on which modern high-input agriculture and all industrial economies now depend. As a result, the industrialized countries of the North face great difficulties in maintaining their energy intensive economies, and the developing countries of the South cannot look at the wasteful economies of the North as a model to emulate.

We humans must soon make a transition in our global energy economy, our style of development, and our approach to agriculture. The least costly and least polluting option is to use existing conservation technology to radically increase the efficiency with which energy is used everywhere and to undertake research to reduce the dependence of agriculture on energy inputs. Several decades will be needed to make an orderly transition in the world’s energy and agricultural economies, and although signs of progress can be found, the transition needs to be accelerated.

So, let me summarize the implications of the energy constraint for agriculture. If we are to meet basic human needs, agricultural yields must be doubled or quadrupled. If we make the increases with high-input methods, farmer’s costs will increase everywhere as petroleum supplies dwindle and energy costs rise. Farmers will be forced either to increase their prices or go out of business.

As you can see, we face a paradox. The hunger problem (and the problem of farm income) cannot be solved by simply growing more food. Growing more food is easy. What is difficult is finding sustainable methods with which farmers can profitably grow more food while selling it at prices so low that the neediest can afford to eat.

We have now discussed two constraints on agriculture: genetic resources and energy. The third constraint is environmental developments that are adverse to agriculture.

The most serious of these developments are the alterations we humans are making in the whole atmosphere of Earth. Of particular concern is the accumulation in the atmosphere of so-called “greenhouse gases” and the release of chlorofluorocarbons that are depleting Earth’s protective layer of stratospheric ozone.

The accumulation of greenhouse gases in the atmosphere is altering Earth’s ability to regulate the planet’s temperature.
Currently, the concentrations of all greenhouse gases are rising, and they are expected to continue to rise for at least several decades. Most alarming is the growing concentration of carbon dioxide. Northern transportation and industry are the principal sources, but Southern deforestation is also significant.

As a result of the increasing concentrations of the greenhouse gases, the temperature of the entire planet is expected to begin increasing soon. A United Nations panel of the world’s leading climate experts estimates that the average temperature of the planet will increase by about 2.5 ºC by the year 2100, an increase unprecedented in the last 10,000 years. Even a half-degree change has enormous significance for agriculture.

It is expected that the increase in temperature will make today’s prime croplands too hot and dry, and will thus push farming into areas with less fertile soils. Farmers’ costs will increase to cover additional fertilizer needed to maintain yields on poorer soil. Also, railroads, ports, grain elevators, flour mills, tractor factories, and other infrastructure would all be in the wrong place. In short, climate change would be highly disruptive in efforts to meet basic human needs.

The other massive change we humans have made in Earth’s atmosphere is in the layer of stratospheric ozone that protects all life from the dangerous ultraviolet component of the Sun’s radiation. Without the protection of this invisible ozone shield, all life on Earth would be endangered by ultra violet radiation, which causes cancer, damaged eyes, impairs the immune system, and damages crop plants.

It is now known that the human release of several chemicals, especially chlorofluorocarbons, does most of the damage to the ozone layer. Once released, some of these chemicals catalyze ozone-depleting reactions for more than a hundred years.
The situation at present is dangerous. The ozone hole over Antarctica has become larger and deeper. From 1979 to 1992, the amount of total column ozone has decreased over most of the planet. Worldwide ozone losses in 1992 were the largest ever recorded. There are now for the first time significant decreases in ozone concentrations during the spring and summer in both the northern and southern hemispheres at the middle and high latitudes, where most humans live and where most food crops are grown.

However, the situation is also hopeful. In 1992, eighty seven countries signed an agreement known as the Montreal Protocol to phase out the production of the most damaging chemicals. A hundred countries, however, have so far refused to sign the Protocol.

If the Montreal Protocol is strengthened to limit further the emissions of additional chemicals, if all countries sign the strengthened protocol and fully comply with its provisions, and if no further surprises develop, the damage done to Earth’s protective ozone shield might be repaired within a century or so.

Let me summarize the scientific information I have just presented. There will be many more of us humans, and it will be difficult for us to meet our most basic needs. But to slow our population growth, we must meet basic needs, and to meet basic needs, we must have a healthy environment. Unfortunately, human activities are already undermining the environment locally and globally. The environmental deterioration is increasing the difficulties of creating the social and economic conditions needed to slow population growth. This vicious circle is a core aspect of the Global Problematique.

There is, of course, much more to the Global Problematique: corruption, AIDS, drugs, debt, technology, water, nuclear, chemical and biological weapons, toxic and radioactive wastes... One could go on and on. But from what I have discussed already we can all see too many interconnected trends going the wrong way.

I think we humans have reached a fork in the path to the future. Let’s look down the two paths that lie ahead.
Down one path, I see steep, slippery ground. I see desperately poor people losing their footing and slipping into a downward spiral of eating their seed grain and burning their shade trees. Then they migrate. Wealthier areas guard their borders to keep refugees out. Many die at the borders. Some manage to slip across, only to live in fear and work in dreadful conditions. Distrust destroys any sense of community among people and nations. Petroleum is exhausted. Pollution of all kinds worsens. Groups of heavily armed bandits begin roaming about, stealing, raping, burning, and killing.

Down the other path I see a very different Earth. Sustainable, just, and humane development for the whole Earth has become the principal goal of every nation and people. People, cultures, and faiths are united in planet-wide efforts to understand Earth and its peoples and to envision what Earth can become. Protection of Earth has become a top priority for every person. Human ignorance, poverty, and bigotry are recognized everywhere as primary threats to global security. Population growth slows and stops. Earth begins to heal, and gradually a sustainable economy emerges which meets even more than the basic needs of everyone.

None of us wants to slip down the descending spiral, but in order to walk the other path we must do some difficult things.

*We must establish the spiritual, economic, political, and social conditions necessary to limit human population to no more than 12 billion, and preferably much less.*

*We must establish the spiritual, economic, political, and social conditions necessary to eliminate over-consumption and waste.*

*We must protect every square meter of land everywhere.*

*We must halt the wholesale extinction of Earth’s species.*

*We must double agricultural yields in a way that is environmentally benign, reduces agriculture’s dependence on fossil fuels, and allows farmers to make a living growing food that even the poorest can afford.*

*We must develop an alternative to the world’s energy economy that reduces dependence on petroleum, increases the use of renewable energy sources, derives maximum benefit from each Btu, and is non-polluting.*

*We must stop the dangerous emissions of greenhouse gasses and ozone depleting chemicals.*

How much time do we have to do these things? We do not have another hundred years, or even another generation.
In fact, we are already too late to help many, including this starving girl who collapsed on the road to a feeding center while a vulture watched and waited.

The truth is that no matter how fast we act or what we do, billions are going to suffer.

That fact, however, is no excuse for inaction. By acting now, we can reduce drastically the damage and suffering our generation will cause. If we do all the things I have just listed in the next 5 to 10 years, we could keep our need for land somewhat below the land available as illustrated in this slide. This would mean that billions of our children would have a chance for a healthy and fulfilling life. It would mean that there would be a little land left for the habitat of endangered species. It would mean that perhaps Earth could begin to heal. It might even mean that our children would have what they need to achieve a sustainable solution to the Global Problematique.

And while I think we could actually do all these things in the next 5 to 10 years, we have many reasons for not acting. Many people are simply unaware of the scope of what is
happening. For others it is hard to believe something so outside human experience could occur. Some want to delay action until every last scientific uncertainty is resolved. Many believe in exceptionalism, which is the notion that my god (or gods) would not let anything like this happen to me, or to my people, or to my species. Some are tempted to think that it might be easier to adapt to the disaster than to change. Others feel defeated before they start because the solutions are exceedingly difficult.

The most serious barrier to action, however, is that the prevailing human dream has failed. The human vision of what we are trying to do on Earth—our prevailing “development model”—has failed.

Back in the 1960s, most of us shared a common dream for the human future. Through the United Nations, we launched the first Development Decade. “Progress” in controlling nature, we thought, was moving us all inevitably from a “developing” life style to a “developed” life style.

We all knew what the developed life style was. We knew because we saw people living it in movies, television programs, and advertisements.

Here it is: A nice private house. A beautiful kitchen with a stove, refrigerator, dishwasher, and clothes washer. A luxurious car. Men and women dressed for success. A personal computer for your child. Monstrous hamburgers and a good cold drink. Low cholesterol, vegetarian dog food. And a gold credit card.
Now, four Development Decades later, we know in our hearts that the developed life style modeled on the industrialized countries of the North cannot be our norm. For 12 billion of us to live as wastefully as the average person in the industrialized countries would require an expansion of the world’s economy by 5 to 10 times. The Earth’s environment and resources could not withstand such an assault.

Our dream has failed for several reasons. It has failed because we thought the whole of Earth was for the use and abuse of as many humans as we might be pleased to conceive. Earth rejects this notion.

Our dream has failed because we thought it was equitable and just. The poor reject this notion.

Our dream has failed because we thought it included everyone it needed to. Women reject this notion.

We are now a species without a vision. We cannot act together because we no longer know our goal. We can no longer guide our countries and our corporations because we no longer know what “development” is. We no longer know how to distinguish “progress” from “failure”.

Our most desperate need is to acknowledge the failure of our old dream and to dream a new dream—a new dream that responds to the Global Problematique.

And here we urgently need help from you, our spiritual leaders. We need you to help us acknowledge that our old dream has failed. We need you to help us dream a new dream—a dream that is not only true to ancient traditions, but also true to the revelations emerging from what we are learning about Earth.

But I must tell you honestly that many people now wonder if any of our faith traditions have the wisdom we need for the future. Many people doubt that there is a “sustainable” faith tradition on Earth today, a faith such that if everyone adopted and followed it, we would be assured a sustainable, just, and humane future for Earth and her people.

Many feel that our faith traditions have become a very central part of the human problem. We urgently need peace, but there are now fifty wars in progress, most fueled by inter-religious hatred. We need the full contributions of our women, but some of our faiths have ancient traditions that severely limit the roles and contributions of women. We must end our war with nature, but some of our faith traditions are extremely anthropocentric in their view of human relations with Earth. We need an ethic that looks
ahead to the issues we will face in the future, but some of our faiths seem so preoccupied with preserving ancient traditions that they appear to have difficulty looking to the future. The followers of each faith must begin asking themselves and their leaders if they have a sustainable faith. I have been asking myself this question about my faith. I can tell you that I do not believe that my faith, Christianity, is a sustainable faith, as it is understood and practiced now. We wealthy Christians are as wasteful as anyone else. We Christians oppose abortion and birth control, but have nothing to say about the responsible stewardship of God’s gift of human fertility in a time of runaway population growth. We Christian men have done our share of oppressing women personally and through the religious traditions and institutions we have created. We Christians hate and kill people of other faiths, as we have been doing most recently in Bosnia. We Christians pay lip service to protecting Earth, but at heart feel Earth is insignificant and irrelevant since our real home is in heaven—which is not on Earth.

This does not mean that I am going to give up Christianity. I could not do that. My faith is too much a part of me, but it does mean, that in the tradition of Martin Luther, I must ask hard questions about my faith. If we are to have sustainable faiths, we must all ask hard questions about our traditions.

Much as I question some teachings and practices of my own and other faiths, I firmly believe that faith traditions are essential for the human future. You are our source of inspiration for what we and Earth can be. Your dreams are our vision and our destiny.

So, I come to you with an overwhelming sense that something is terribly wrong on Earth. I come to you with questions that are being raised openly today by parents and children, by scientists and economists, by philosophers and theologians, by historians and anthropologists, by religious and secular leaders alike, as they struggle to find their own sustainable faith and a new vision for the future of Earth. I come to you asking you to acknowledge the Global Problematique and to struggle with four spiritual questions it raises:

First, how are we to meet the legitimate needs of the growing human community without destroying the ability of Earth to support the community of all life?

Second, what is the meaning of “progress” and how is it to be achieved? Can there be progress for the human species at the expense of the whole community of life?

Third, how should we relate to those who differ in race or gender, or culture, or politics, or especially faith? How can inter-religious hatred and violence be eliminated?

Fourth, how should my faith tradition—and yours—allow for criticism, correction, reinterpretation, and even rejection of ancient traditional assumptions? How are we to incorporate new understandings or revelations, especially the new truths about Earth emerging from science—scientific truths with spiritual significance?

Are you, our spiritual leaders, prepared to grapple honestly with these questions? Are you willing to engage in open and sincere dialogue with scientists who are bringing us truths never known before in human history? Are you willing to admit the possibility of need for reinterpretation and even rejection of ancient of ancient traditions and assumptions? If you are, then perhaps together we humans can dream a new dream, which is our only possible answer to the Global Problematique.
But to dream is not enough. We must also act, and to act we must be inspired. We humans need an occasion that inspires us and brings out in us our very best instincts—like a 50th wedding anniversary or a 100th birthday does. We need a global occasion that, like the 100th Anniversary of the Parliament of the World’s Religions, prompts us to extraordinary efforts to participate. We need an occasion in which we all feel involved, cooperative, loving, and generous.

We have such an occasion approaching. The occasion is the year 2000, and I would like to tell you a dream I have for the year 2000.

The year 2000 will be a global anniversary on the common calendar that we all use now for science and commerce. It is the first global anniversary to occur since humans developed a planetary consciousness, and it will be celebrated with great enthusiasm everywhere on Earth. Already people who want to be the first to enter the 21st century are booking hotel ballrooms along the Greenwich meridian. Others are booking Concord supersonic jets so that they can fly across the Atlantic to attend New Year’s Eve parties in both Europe and America and celebrate the entry into the new millennium twice.

Beyond the frivolous, however, Earth’s entry into a new century and a new millennium could be a profoundly inspiring and spiritual experience reinforcing human solidarity and leading us all into concerted action based on a new dream for Earth.

But if Earth’s entry into a new millennium is to have the inspirational qualities, we must prepare to observe the spiritual and symbolic aspects of this extraordinary occasion. We must recognize the year 2000 as a transitional moment for Earth and all humans.

In most cultures, transitional events—such as birthdays, graduations, marriages, and funerals—are marked by celebrations having three elements. The first element is a period of grieving, a period of preparation to give up a past condition. To become 50 years old, I had to give up being 49, and that was a little sad. For us humans to enter the 21st century, we must mature and die to our old, 20th century ways of being and thinking, and that will be a little sad, too.

The second element is a moment of transition, the actual death of the old and beginning of the new. This moment is marked by a symbolic act, such as the embrace or lifting of the veil at a wedding, the movement of tassels at a graduation, the closing of the casket or the lighting of the pyre at a funeral. For our entry into the 21st century, we need a new symbol, perhaps the crossing through water to a new place and a new way of being.

The third element of a transitional event is celebration—the celebration of the possibilities of the new condition. Wedding parties and graduation parties express our best wishes for the future possibilities of those who have entered a new era of their lives. For our entry into the new millennium, we must have a planet-wide celebration expressing our best wishes for the whole community of life on Earth.

Gifts are a central element of transitional celebrations. The gifts symbolize our good wishes in a tangible way. For our entry into the new millennium, each person, each family, each organization, each community, each country, and each faith must offer gifts to help Earth through the 21st century and the third millennium.

Although many of these gifts will be costly and precious, they are not the gifts in the tradition of materialism. They should be gifts of lasting value for Earth from each of us,
chosen to be appropriate for this extraordinary occasion. A nation or group of nations, for example, might create a global crop monitoring system for Earth by making constructive use of the military satellite technology they have.

Individuals of every faith might learn about other faiths and deliberately decide to begin living in ways that are not needlessly offensive to others.

Look at this boy I found staring up at me from my newspaper one morning. Do you feel the penetration of his eyes? Do you sense his sober awareness that what is happening to his part of Earth is also happening to him?

And look at this photograph of our lonely, isolated, beautiful home planet. Do you sense that what is happening to that boy is happening to Earth? I do.

I also sense that Earth’s entry into the next millennium cannot be just a major event. It cannot even be just the event of a lifetime, or even the event of a thousand years. That would not be nearly enough. Earth’s entry into the millennium must be the time when
humans begin to live sustainably, justly, and humanely on Earth. If it is, it will be the event of an entire Earth-time. And if it isn’t, it will be nothing.

Now, I have a request, to you, our spiritual leaders—a request that I make on behalf of, not just all humans, but on behalf of the whole community of life. Would you devote the next 7 years of your lives to helping all 6 billion of us humans to learn from each other and from Earth how to live a sustainable, justly and humanely on the Earth in the next millennium? Would you help us all—would you help Earth—dream a new dream?

Would you put away hatred and work together in ways previously unimagined and unimaginable? Would you develop a community of Earth’s faith traditions that is an example of the kind of open communication, mutual respect, acceptance, cooperation, and good will that should characterize the emerging global community of nations and people?

Would you lead the way to a planet-wide spiritual celebration of Earth’s entry into a new era? Would you bring every person, every community, and every country to the celebration with appropriate gifts? Most importantly, would you and your faith tradition come too, bringing a gift that will change the course of Earth?

*If you will*, the original source of creative energy will show us all a new future. *Then*, with hope in our hearts, we can die in peace—*all 6 billion of us*—to our old, immature, 20th century ways of being and thinking. We can cross the waters together. And we can celebrate *Earth’s arrival in a new era* in a way that will be remembered forever.