SUE LAWLEY: Hello and welcome to the Royal Society in London, a place where, since its foundation in 1660, great minds have gathered to discuss the important scientific issues of the day. It's a fitting place to introduce this year's Reith lecturer, a man who believes we need a new enlightenment to solve many of the world's problems. The American press has hailed him as one of the world's most influential people, a plaudit due in some measure no doubt to the fact that he's not afraid to put his theories to the test. Like one of his great heroes, John Maynard Keynes, he's moved between the academic life and politics, working successfully with governments in South America and Eastern Europe to help restore their broken economies. In this series of Reith Lectures he'll be explaining how he believes that with global co-operation our resources can be harnessed to create a more equal and harmonious world. If we cannot achieve this, he says, we will face catastrophe; we'll simply be overwhelmed by disease, hunger, pollution, and the clash of civilisations.

In this, the first of his series of five lectures, he begins by setting the scene, describing an over-populated world on the brink of devastating change, a world that, as the title of the lecture says, is bursting at the seams. Ladies and gentlemen will you please welcome the BBC's Reith Lecturer 2007 - Jeffrey Sachs.

(APPLAUSE)

JEFFREY SACHS: Thank you very much Sue, thanks to BBC, thanks to the Royal Society, and thanks to all of you, ladies and gentlemen. Sue Lawley has it right that this is a house that has assembled the world's greatest minds throughout modern history, and many of them, as I look out, are in the room tonight. What an extraordinary gathering, a unique gathering of leaders of thought and action from so many disciplines, and it is with profound humility that I speak to you, but also profound hope that maybe, by the conversation that will commence tonight, and this fabulous opportunity of the Reith Lectures to have a global conversation, we can move forward to a world that is a bit safer than the one that we are now inhabiting. This is a lecture series about choices, choices that our generation faces, choices that will determine the nature of our lives and the lives of our children, and of generations to come. We have some momentous choices to make and I hope to describe them tonight and in the future Lectures.

I want to start with my favourite speech of the modern American Presidency and

I think one of the most important statements made in modern times, one that truly did change the course of history. I'm referring to John Kennedy's Commencement Address at American University, June 10, 1963. It was an address that helped rescue the world from a path of self-destruction. It came in the immediate wake of the Cuban missile crisis, when Kennedy and the world had peered over the abyss, and what President John Kennedy said on that day I think resonates today and is important for all of us in all parts of the world. If you'll permit me to quote from it a little bit at length, just at the beginning. I do believe it helps to set the stage.

He said:

First examine our attitude towards peace itself. Too many of us think it is impossible, too many think it is unreal, but that is a dangerous, defeatist belief. It leads to the conclusion that war is inevitable, that mankind is doomed, that we are gripped by forces we cannot control. We need not accept that view. Our problems are man-made, therefore they can be solved by man, and man can be as big as he wants. No problem of human destiny is beyond human beings. Man's reason and spirit have often solved the seemingly unsolvable, and we believe they can do it again. I am not referring to the absolute infinite concept of universal peace and goodwill of which some fantasies and fanatics dream. I do not deny the value of hopes and dreams, but we merely invite discouragement and incredulity by making that our only and immediate goal.

Let us focus instead on a more practical, more attainable peace, based not on a sudden revolution in human nature but on a gradual evolution in human institutions, on a series of concrete actions and effective agreements which are in the interest of all concerned. There is no single simple key to this peace, no grand or magic formula to be adopted by one or two powers. Genuine peace must be the product of many nations, the sum of many acts. It must be dynamic, not static, changing to meet the challenge of each new generation, for peace is a process, a way of solving problems.

I want to talk about the challenge of our generation. Ours is not the generation that faced the challenge of Fascism, ours is not the generation to have first grappled with the nuclear demon, though we still grapple with it today. Ours is not the generation that faced the Cold War. Ours is not the generation incidentally in which the greatest problem is the war on terror, or Iran, or other ideas that are current. Our challenge, our generation's unique challenge, is

learning to live peacefully and sustainably in an extraordinarily crowded world. Our planet is crowded to an unprecendented degree. It is bursting at the seams. It's bursting at the seams in human terms, in economic terms, and in ecological terms. This is our greatest challenge: learning to live in a crowded and interconnected world that is creating unprecedented pressures on human society and on the physical environment. As John Kennedy said, we will need to solve these problems, the ones that are unique to our generation, if we are to find peace. Obviously we are not just in a cold war, we are in a hot war right now, because we have failed to understand the challenges and we have failed to take appropriate measures to face them. We don't need to dream. I am going to talk about concrete actions, I am going to discuss, I hope, effective agreements, and most importantly I want to talk about a way of solving problems. It's a fascinating and crucial concept for us - peace as a way of solving problems. We clearly are not on a path of problem solving now with the world, we are on a path of increasing risk and increasing instability, and by all objective measures the path of increasing hatred as well. We have not yet found a way of solving problems that our generation faces now.

Most importantly for us on this crowded planet, facing the challenges of living side by side as never before, and facing a common ecological challenge, has never been upon us in human history until now. The way of solving problems requires one fundamental change, a big one, and that is learning that the challenges of our generation are not us versus them, they are not us versus Islam, us versus the terrorists, us versus Iran, they are us, all of us together on this planet against a set of shared and increasingly urgent problems. By understanding those problems, understanding them at their depth, understanding what we share with every part of this world in the need to face these challenges, we can find peace. But we are living in a cloud of confusion, where we have been told that the greatest challenge on the planet is us versus them, a throwback to a tribalism that we must escape for our own survival.

I'm going to talk about three common problems that we face. They are inter-connected, they build on each other in ways that amplify or create abrupt change, abrupt risk, and highly non-linear responses to the threats we face. The first challenge that I'll talk about is the challenge of what Paul Crutzen has magnificently called the Anthropocene. That is the idea that for the first time in history the physical systems of the planet -- chemical fluxes, the climate, habitats, biodiversity, evolutionary processes -- are to an incredible and unrecognised extent under human forcings that now dominate a large measure of

the most central ecological, chemical and bio-physical processes on the planet - the hydrological cycle, the carbon cycle, the nitrogen cycle, the location and extinction of species, and basic physical habitats. Of course human forcings have always played their role. We know that the hominids already controlled fire a million or more years ago, and therefore changed landscapes, even before the rise of homo sapiens. But never has the control of such fundamental processes been determined by human forcings, and we've barely awakened to that reality.

The second common challenge is a challenge of geo-politics, a challenge that I'm going to call the Age of Convergence. In many ways it's wonderful news. It's the notion that in a world that is more connected than ever before, a world where economic development, at least for the last two hundred and fifty years, has been driven by technology, and now a world where those technologies diffuse rapidly around the world, we have the fabulous prospect for the rapid closing of economic gaps that now exist between the rich and the poor. One result is that there will be in our time a fundamental shift of economic power, and the political power that goes along with it. We started this decade with a fantasy, the fantasy of the United States as the world's sole superpower, the fantasy of the United States as the sole indispensable power, it was called, the fantasy which we should have known from history always to be wrong and dangerous, of the United States as the New Rome, being urged on to take on the imperial mantle even by some who ought to know a lot better. But it was a fantasy because just as this was being proclaimed, China, India, and other regional powers were bound to be increasing their influence and their economic weight in the world by virtue of the shared capacity to benefit from technology, which is the foundation of economic development. As an economist, I subscribe to a philosophy that was first initiated by Adam Smith in 1776, which is why I'm so happy that these Reith Lectures will take us to Edinburgh - no accident. Smith talked about how global markets and international trade can be a fundamental diffusion mechanism for these technologies, and now that is happening. But we're not ready for it.

I want to call the third of our common challenges the challenge of the weakest links. In an interconnected world, all parts of the world are affected by what happens in all other parts of the world, and sometimes surprisingly so. We cannot be surprised when events in some far off and distant place - and I'm not talking about Central Europe, I'm talking about halfway around the world in the landmass of Eurasia - can be of fundamental significance even for survival, for the spending of hundreds of billions, if not trillions, of dollars for the direction of

global politics. In an interconnected world we have great need and basic responsibility, for our own survival, to attend to the weakest links. By that I mean those places in the world that suffer, those places in the world where people die because they are too poor to stay alive, those parts of the world which -- by virtue of physical geography, epidemiology, climate stress, rain-fed agriculture and drought-prone savannah climates for example -- face horrific challenges to even get onto the ladder of development. One billion people on the planet are too poor, too hungry, too disease-burdened, too bereft of the most basic infrastructure even to get on the ladder of development. The rich world seems to be believe, despite all the fine speeches (and there have been many), that this doesn't really matter, because the actions of the rich countries don't begin to address this problem. We are leaving ten million people to die every year because they are too poor to stay alive. Fine speeches will not solve that problem.

Our challenge is to understand these common problems, to see that the whole world is arrayed on the same side of them; to understand that a leader in Iran, or in Korea, or in Sudan, or in other places where we've made it a point not even to have a conversation, much less a negotiation or an attempt at peaceful solution, is facing problems of water supply, climate change, food production, poverty, and disease burden, many of which impinge directly on us. Can it be true incidentally that because we don't want to talk to Iran, H5N1 won't pass through Iran, that we won't have to deal with avian 'flu in places we don't want to speak to, where we have put pre-conditions to negotiations, because we can't see the commonality of our problems? Can it really be, ladies and gentlemen, that the solution to Darfur, one of the most urgent crises on the planet, is all about peacekeepers and troops and sanctions, when we know that in Western Darfur the rebellion started because this is just about the poorest place on the whole planet, because there is not enough water to keep people alive, the livestock have no veterinary care, there's no basic infrastructure, and the electricity grid is hundreds of miles away? Can we really think that peacekeeping troops and sanctions will solve this problem? I do think we have a fundamental re-thinking to do in each of these areas.

I'll discuss the Anthropocene in Beijing, China, which soon will be the country that is the largest emitter of carbon dioxide on the planet, and one that faces its own profound challenges of water stress, which will worsen, perhaps immeasurably, as the glaciers of the Himalayas melt and as the seasonal timing of snow melt from the Himalayas changes the river flow of the Yangtze and

Yellow rivers and other rivers of Asia. The Anthropocene tells us that it's not just about one problem, as Sir Nicholas Stern, one of the intellectual leaders of our time, has brilliantly exposed in his report for the UK government. It's not only the problem of mass extinctions, or only the problem of the mass destruction of fisheries in the North Atlantic and in many other parts of the world. We are weighing so heavily on the Earth's systems, not only through carbon dioxide emissions changing climate but through carbon dioxide emissions acidifying oceans, through destruction of habitat, which is literally driving perhaps millions of species right off the planet. We are over-hunting, over-fishing, and over-gathering just about anything that grows slowly or moves slowly. If we can catch it we kill it. Our capacity in the Anthropocene is unprecedented, poorly understood, out of control, and a grave and common threat.

The illusions about geo-politics which I mentioned prevent us from solving these problems as well. The United States, my own country, has been in a fantasy of "going it alone," when our problems are so fundamentally global and shared. How do you address climate change, even if you recognised it, by yourself? The U.S. Government solved that problem temporarily by not recognising it. But when they do recognise it they're going to have to recognise it in a shared and global way.

And how can it be, ladies and gentlemen, that we think we can be safe? We think we can be safe when we leave a billion people to struggle literally for their daily survival, the poorest billion for whom every day is a fight to secure enough nutrients, a fight against the pathogen in the water that can kill them or their child, a fight against a mosquito bite carrying malaria or another killer disease for which no medicine is available, though the medicines exist and are low cost, thus letting malaria kill one or two million children this year. How can this be safe? How can we choose, as we do in the United States, to have a budget request this year of $623 billion for the military - more than all the rest of the world combined - and just $4.5 billion for all assistance to Africa and think that this is prudent? One might say it is science fiction that a zoonotic disease could arise and somehow spread throughout the world, except that AIDS is exactly that. How many examples do we need to understand the linkages, and the common threats, and the recklessness of leaving people to die -- recklessness of spirit, of human heart, and of geo-political safety for us?

President Kennedy talked about a way of solving problems, and that too will be

a theme of these Lectures. We are entering I believe a new politics, and potentially a hopeful politics. I'm going to call it open-source leadership. If Wikipedia and Linux can be built in an open source manner, politics can be done in that manner as well. We are going to need a new way to address and to solve global problems, but our connectivity will bring us tools unimaginable even just a few years ago. I'm going to try to explain how this can be done, how without a global government we can still get global co-operation, how initiatives like the Millennium Development Goals can be an organising principle for the world -- though there is no single implementing authority -- and how it is possible to coalesce around shared goals. I am going to explain how scientists can play a fundamental role in this, such as they do in the Intergovernmental Panel on Climate Change (IPCC). The world is hungry for serious knowledge, for the information from what are sometimes called epistemic communities - that is communities of expertise - that can help to bring the best information to bear on the most crucial problems that affect the survival and the livelihoods and the well-being of people around the world. I'm going to talk about how our governments can be re-organised and need to be re-organised because we are living with nineteenth and twentieth century government structures for twenty-first century problems. Our governments simply do not understand the nature of these problems. Ministries generally are like stove pipes, narrowly defined. That's often true in academia as well. But the problems I will discuss cross disciplines and areas of knowledge, and inherently require cross-disciplinary and novel thinking, whether they are problems of poverty, disease, climate change, energy systems, war and peace, or Darfur. These problems cannot be left to the normal ways of operation, but that is what we are doing. That is why we see our governments flailing about blindly. These are not just "intelligence" failures, in the sense of our spy agencies, though surely those exist and are serious. We are experiencing the deep incapacities of our government to understand these challenges. We need some fundamental re-organisation, which I'll discuss.

We need, as President Kennedy said, concrete actions. I will discuss those, because there is no sense in theory if there is not something to do, starting today. There are things to do in all of these areas that can make a difference, a life and death difference. We need -- this is the possibility of our inter-connected, socially networked internet-empowered age --involvement from all of us. We all play a role. It doesn't just go through government, and if government remains as impervious to evidence and knowledge and capacity as it is right now, we're going to have to go increasingly around government. Perhaps that's inevitable, perhaps that's just a particular failing of our immediate times, I'm not sure. But

we are going to have to play unique roles in terms of corporate social responsibility, civil society, and as individuals as well.

I'm an optimist, though you might not detect it! You might not hear it in this first lecture, because I want you to sit up, with open eyes. You know many or all of the things I'm saying, and certainly if there is one introductory note it is that we must not for one moment think that we're on an acceptable course right now. I want to stress, however, that fundamentally we have choices, and we actually have some terrific choices. We have the ability to do things at much lower cost, and much greater efficacy, than almost any of us can know, unless we are lucky enough to be engaged in epistemic communities that allow us to hear the wonderful news. I'm a partisan, for example, of anti-malaria bed nets, and I'll just give you one fact. There are three hundred million sleeping sites in Africa that need protection from malaria. Anti-malaria bed nets last five years, and cost a mere five dollars - one dollar per year. Often more than one child sleeps under a net. Economists are reasonably good at multiplication, so for three hundred million sleeping sites at five dollars per net, I calculate $1.5 billion. I also am acceptably good at long division. $620 billion of military budget, divided by 365 days, tells me that we are now spending $1.7 billion per day on the Pentagon. John Kennedy said in his world changing speech, "for we are both devoting massive sums of money to weapons that could be better devoted to combat ignorance, poverty and disease," and my little calculation has shown you that one day's Pentagon spending could cover every sleeping site in Africa for five years with anti-malaria bed nets. And yet we have not found our way to that bargain, the most amazing one of our time. We do have choices -- they are good ones if we take them.

I want to close with what President Kennedy said about that. I regard these among the most beautiful lines ever uttered by a world leader. First he said, "In short, both the United States and its allies, and the Soviet Union and its allies, have a mutually deep interest in a just and genuine peace, and in halting the arms race. Agreements to this end are in the interests of the Soviet Union as well as ours, and even the most hostile nations can be relied upon to accept and to keep those treaty obligations, and only those treaty obligations, which are in their own interest." He uttered those words and within a few weeks the limited test ban treaty was negotiated. He changed the course of history by showing that there was a path for peace that was mutually acceptable. But then he said this, and what could be more important for the challenges of our generation?

So let us not be blind to our differences, but let us also direct attention to our common interests, and the means by which those differences can be resolved. And if we cannot end now our differences, at least we can help make the world safe for diversity, for in the final analysis our most basic common link is that we all inhabit this small planet, we all breathe the same air, we all cherish our children's future, and we are all mortal.

Thank you very much.

(APPLAUSE)

SUE LAWLEY: Jeffrey Sachs, thank you very much indeed. Well with us here in the Royal Society in London for this BBC World Service Reith Lecture is a distinguished audience to explore and challenge that view of where we go from here, so let me begin with Sir Christopher Meyer, a former British Ambassador to the United States and currently Chairman of the Press Complaints Commission. Sir Christopher, your question if you would please?

SIR CHRISTOPHER MEYER: Jeffrey Sachs, I would love to join you in your optimism, I would love to join you on this voyage to create a new politics. I would love to join you on a voyage to avoid conventional governments. But surely it's pie in the sky, because man does not change. What on earth leads you to think that this kind of human nature is ever going to change?

JEFFREY SACHS: The world does change, it changes remarkably. Many of the most important changes in the world have been led from this corner of the world. The world, as I recall, two hundred years ago to this year, was still a world of slavery, of slavery within the British Empire, but in 1807 the slave trade ended. We had rule of colonial powers. But that ended and independence, sovereignty -- which I believe is a basic part of good politics -- good governance, and hope for the future, came to the world, it's a fundamental change. We live in an age when women are empowered as never before in human history. We live in the shadow of the Civil Rights movement in the United States, and the end of Apartheid. We live in a world of choice. It's not right to say the world doesn't change, and even if human nature doesn't change our institutions can change. So I believe that we can create the kind of world that we want, and if it's true that human nature doesn't change, human understanding, rationality, and our institutions can all play a role to lead to changes in behaviour.

SUE LAWLEY: Let me ask Sir Christopher if he's any more persuaded that there's proof positive in there, that this is not pie in the sky.

SIR CHRISTOPHER MEYER: No I don't, I'm afraid I don't, I don't see any proof positive in there whatsoever. I'm not denying the notion of progress, I'm not denying the notion that people do do good things and make good changes. What I think I'm saying is that the kind of change that you want, and you've advocated it with extraordinary passion and eloquence, does require a step change in human nature which is simply not going to happen.

SUE LAWLEY: Let me just take it… Let me just… Another point, the lady there, behind, just behind, thank you very much. Tell us who you are as well.

SUE BLACKMORE: Sue Blackmore, psychologist from Bristol. I too wish your optimism were infectious, but I have not been infected with it. In fact I feel more depressed, really at… (LAUGHTER) a deep disjunct in your argument, which seems to be this. You've described the poverty, the deprivation, the people who are struggling, which shame us all, of course, and I'm sure like everyone else I feel bad about it, but you've also identified what is the root problem, which is over-population on this planet - too many people. Now if we all buy these mosquito nets, and those children live, what are they going to live for? They're going to live for not enough water, not enough food, not enough to go round. That's not a solution. We need something better than that don't we?

JEFFREY SACHS: The evidence is overwhelming that it's possible and necessary to have a rapid demographic transition on a voluntary basis to greatly reduce fertility rates in poor countries, and that by far one of the most powerful ways to achieve that is through child survival. Child survival is correlated and causally related to reduced fertility rates among poor households. You want poor households to cut their fertility and to have fewer children - assure them that the fewer children that they have will survive, they won't be carried off by a mosquito bite. So it is fundamentally the opposite that saving children somehow over-populates the world. This is a basic misunderstanding. But it's a, it's a big misunderstanding… (APPLAUSE) It's a big misunderstanding to think that you leave children to die as a solution to that.

SUE LAWLEY: Yes?

JENNY RUSSELL: Jenny Russell, I'm a Guardian journalist. I think the core

problem that you're talking about here is really one of over-consumption, and I do believe that you're an optimist when you say that you feel that actually most of these problems can be solved without much sacrifice on people's part, because I simply don't see how that can be so. So what you're really saying is that people have to stop wanting to consume so much. Now I see absolutely no evidence whatsoever that anybody is willing to do that. You talk about governments being short-term, which they are, but we as individuals are all extremely short-term, we've got extremely poor people in this country…

SUE LAWLEY: I'm hoping for a question mark.

JENNY RUSSELL: …and no-one's willing to do anything about that. When you, when you talk about this, what is it that you're actually proposing will change, because all I can see is that everyone in the globe is going to go on wanting to consume as much as possible until it's impossible.

JEFFREY SACHS: I am not arguing the over-consumption argument - that is actually not my point. I do not believe that the solution to this problem is a massive cutback of our consumption levels or our living standards. I think the solution is smarter living. I do believe that technology is absolutely critical, and I do not believe on the evidence that I'm going to be discussing in these Lectures that the essence of the problem is that we face a zero sum that must be re-distributed. I'm going to argue that there's a way for us to use the knowledge that we have, the technology that we have, to make broad progress in material conditions, to not require or ask the rich to take sharp cuts of living standards, but rather to live with smarter technologies that are sustainable, and thereby to find a way for the rest of the world, which yearns for it, and deserves it as far as I'm concerned, to raise their own material conditions as well. The costs are much less than people think. You are making the argument that this is so costly we don't dare do it.

SUE LAWLEY: But I can ask you just, Jeff, if you would, because I want to keep getting some more people in, to address the main criticism that we're hearing here that you know the history of the second half of the twentieth century is littered with goals that have been missed, with good intentions that haven't been fulfilled, with grand plans and the kinds of words you're using tonight that people have stood up and said but haven't translated onto the ground.

JEFFREY SACHS: Yes.

SUE LAWLEY: What do you say and what are you offering that is different?

JEFFREY SACHS: People have always denied the possibilities of concrete progress. We were expected to have an Armageddon when President Kennedy gave this speech in 1963. You look at public opinion in 1963 - the overwhelming expectation was that war with the Soviet Union was inevitable. And the expectation was on just about every piece of progress that it couldn't happen. The expectation was that by now India would be wracked by devastating famine year in, year out, that hundreds of millions would die, that the die was already cast. So frankly the extrapolation from the present to the future on current trends is the easiest thing in the world. The idea that there can be change perhaps is a hard thing to accept. The idea that there has been profound change should be understood by everybody. And I want to make a key message, which obviously in this first talk I can't amplify, which is that the choices are better than you think, because the cost of these solutions is much lower than is feared. And this is the most important point. Climate change is not going to end our civilisation unless we pretend that it doesn't exist or unless we are so afraid that we don't confront it. If we confront it in a timely and sensible way, we can head off the worst at quite low cost. We can end extreme poverty within our own generation if we stopped rubbing our hands in angst, or just turning our eyes away. The more people understand the real choices, the real consequences and the real power that we have, with the phenomenal technologies that we have available, the more likely it is that we make the right choices - that's why it's worth talking about these things, because they're not ...

SUE LAWLEY: Let me…

(APPLAUSE)

SUE LAWLEY: Let me bring in somebody who's seen how some of these plans work on the ground. She's Geri Halliwell, former Spice Girl of course, and she's currently a UN Goodwill Ambassador. Geri, your question?

GERI HALLIWELL: Hi. I'd like to say that I really support you and I think it's really wonderful to have a positive message. And I work for the UNFPA, what you talked about, and I went to Zambia last year.

SUE LAWLEY: For family planning yeah?

GERI HALLIWELL: Yeah, for family planning, health and reproductive care, highlighting Aids, and women's maternal healthcare, and what I learnt was that when we empower women through education, really taking care of their own health, everybody benefits. You know villages thrive through their economy. And you know this, this tribal leader, he was very forthright in his thinking although he was very traditional - he said when we empowered women at this very grass roots level everyone thrived, which was wonderful to hear this. So my question to you is that do you think that if we encourage more women, do you think that would have a positive effect on poverty?

SUE LAWLEY: Do you mean in the African political arena?

GERI HALLIWELL: Particularly there, but all over. You know…

SUE LAWLEY: More women.

GERI HALLIWELL: What do you think Jeffrey?

SUE LAWLEY: He's in touch with his female side!

GERI HALLIWELL: I think so!

JEFFREY SACHS: How could you argue with that? (LAUGHTER) I think it's an absolutely splendid idea and we are celebrating the election of the first woman Head of State in Africa - Ellen Johnson-Sirleaf, in Liberia. She is brave, she's tough, she's smart, she's caring, and she's making progress in what is one of the most difficult places in the world that went through years and years of extraordinary war. What we found in the villages where we're working, in the Millennium Villages, which I'm going to talk about in a later lecture - is that if you help with the basics, you automatically empower the women and change the communities. We're finding in one village after another that they may elect the women to be the heads of the village council because they're the best farmers, and then the men start saying maybe they can get something out of this by learning the same techniques. So we're finding exactly that this practical empowerment does work when you're specific, concrete, facing the real challenges of people in the villages.

SUE LAWLEY: What are the solutions? How do you overcome tribalism,

corruption, ignorance, fanaticism? I mean you've got the President of the Gambia at the moment walking around saying that he has a cure for Aids, a herbal cure for Aids, and he's pouring it himself, anointing people with his own hands, and expelling from his country the UN worker who dares to cast aspersions about you know the efficacy of this cure. How do you overcome that kind of ignorance?

JEFFREY SACHS: You know it's a little bit funny for me, I guess I live in a political world naturally with what I do and you don't just say something and expect it to happen. This takes an effort. And when Wilberforce started in this city in the 1770s and said that slavery should end in the empire, he didn't have a talk to this group and they said. 'Oh that's very unrealistic, (LAUGHTER) there's some very powerful slave traders out there that are never going to go with it, just give up and go home.' You know it was a fight. (APPLAUSE) It was a fight for half a century. Don't be pessimistic because it doesn't happen immediately. Lots of things happen - they just take time. Let me give one example. In early 2001, based on work that I was leading for the World Health Organisation, I issued a statement with my colleagues at Harvard saying that people in Africa should be treated with anti-retroviral medicines. At the time there was a huge attack by officialdom - 'How could you do this? It's completely irresponsible.' Where are we today? Of course we now have a Global Fund to fight AIDS, TB and malaria. There are billions of dollars being spent on this. There is a rapid scaling up of treatment, there is a commitment that by 2010 there should be universal access to anti-retroviral medicines for all who need them. Don't tell me things can't change, and that they can't change fast. We just need to fight for them, based on the evidence.

(APPLAUSE)

SUE LAWLEY: I'm going to take some comments. Comment over there from you, yes? Quick comment please.

MARK WOODALL: Yes, good evening, Mark Woodall, Climate Change Capital. In the year of the Anthropocene where the dramatic effects of climate change may not be visible in the democratic cycle, and tough decisions have to be made now, what is the role for unelected supranational bodies to make those tough decisions?

SUE LAWLEY: I'm not going to get an answer to that straightaway, I'm going to

get another comment here if I can please, because we really must move towards a close. Yes?

ELIZABETH HAYDN JONES: Hi, I'm Elizabeth Haydn Jones, I'm an optimist. I just have a very simple comment, which is if we don't believe that human nature can change, then less than a hundred years ago I didn't even have a vote let alone have the chance to be in this illustrious company of predominantly white men!

JEFFREY SACHS: (LAUGHS)

SUE LAWLEY: Fine. And there's another woman here, just on your left here.

JUSTINE FRAIN: Justine Frain from GlaxoSmithKline. You referred to a coalescence around shared goals, which implies global co-operation, and an approach to attack some of the big issues such as poverty. Aside from commandeering the US military budget, how are the economics of this actually going to work in practice?

SUE LAWLEY: Well I'm not going to take an answer to that because I think it could be longer than we've got space for, (LAUGHTER) but point made. I'm going to have another comment back there, and then I'm going to set Jeff the problem of trying to give a compendium answer to these disparate comments.

ANDY ATKINS: I'm Andy Atkins from the Relief and Development Agency, TIF, and I'm on the Board of a campaign called the Market Challenge, to galvanise Christians around delivering the Millennium Development Goals. I'm an optimist, I believe we have to have faith, but I know that the battle is long. We've got seven years 'til the Millennium Development Goals are theoretically to be delivered. What for you would be the next critical steps to re-galvanise political weight around that as well as public support for them, after the high days of the Make Poverty History campaign in 2005 - one campaign? We've seen a dip, but we're only seven years out from theoretical delivery date. What would you do next?

SUE LAWLEY: Can you give us a brief answer on that?

JEFFREY SACHS: What I want is that the promises that were made at Gleneagles get put transparently into time lines and responsibilities. The rich

world promised to double aid by 2010. Who's going to do it, on what time line? Which countries, which recipients? Let's get real now. And all we have to do is just live up to the commitments, and we'll make a fantastic breakthrough. It's not so hard to do. We don't even need new promises, we need the fulfilment of the ones that have been made.

SUE LAWLEY: Terry Waite I see over there. What's your comment? Just wait for the microphone.

TERRY WAITE: I would just like to go back to the first point that was made, by Christopher Meyer. The thesis seems to be based on the assumptions that human beings will so shape institutions that right choices will be made. But what is the basis, the real basis for having such faith in human nature, because I'm not entirely convinced by the empirical evidence that you've produced.

JEFFREY SACHS: I thought after such a depressing lecture, for five sixths of it, that people would not simply hone in on my unbounded optimism. I tried to explain actually. I spend my time with people who are dying. Twenty-two years ago I started to say that we needed debt cancellation for the poorest countries. (APPLAUSE) It came late, but it came. I can't give up, that we are doomed. (APPLAUSE) That's why I started this lecture as I did, that too many of us think it is impossible, too many think it is unreal, but that is a dangerous defeatist belief. That's exactly where I started. We have to believe that we can make choices if we can understand them. We have to believe that the more we analyse together and reason together, especially in this house of all places on the planet, that it's possible to sort out some of these things. No part of the whole planet has done more than this institution to change the course of history in fact. Life expectancy was twenty-five years, and it's because of what this house and what it represents has accomplished, that in the rich world we're at eighty years, and in the middle income world we're at seventy years. And when I think about how Condorcet, months before he was killed in the French Revolution, talked about how we could harness reason to grow more crops and to extend life expectancy - what right did he have to be optimistic, but he got it exactly right. So what right do we have to be so pessimistic, and blind, and not moving, when people are dying on our watch?

(APPLAUSE)

SUE LAWLEY: We have four more Lectures and four more debates to come, so

we'll leave this one here for now. Next week we're in China, in Beijing. It's a country which stands, as you've heard, at the centre of Jeffrey Sachs' vision of our world in the twenty-first century. What happens there, what is happening there, will affect us all as we face up to the economic and environmental challenges of the future. That's Sachs over Beijing, next week. Until then from the Royal Society, goodbye.