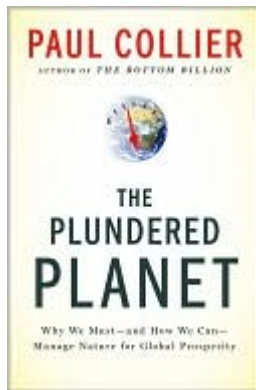


The Plundered Planet: Why We Must--and How We Can--Manage Nature for Global Prosperity

April 29, 2010



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Paul Collier

Joanne J. Myers

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Introduction

JOANNE MYERS: Good morning. I'm Joanne Myers, Director of Public Affairs Programs, and on behalf of the Carnegie Council, I would like to thank you all for joining us.

Our speaker is one of the world's leading experts on African economies. He last [spoke at the Carnegie Council in 2008](#), upon the publication of his multi-prize-winning classic, [The Bottom Billion](#).

2008 was a very interesting year for Professor Collier, because in that year he not only won the Estoril Distinguished Book Prize, the Arthur Ross Book Award, and the Lionel Gelber Prize, but even the rock star [Bono](#) of U2 fame was photographed with The Bottom Billion in his hands.

It is a pleasure to welcome him back to this Public Affairs Program, on the publication of his latest book, [The Plundered Planet: Why We Must--and How We Can--Manage Nature for Global Prosperity](#)

[Prosperity](#). This work builds upon his renowned research on developing countries and the poorest populations. The same skills that Professor Collier displayed in his earlier texts are evident once again, which is to say, straightforward explanations, humor, and accessibility. It is also a bit more personal, in that he talks about his own struggle to reconcile the quest for global prosperity with an ethical approach to the natural world.

As is typical, Professor Collier clearly diagnoses the problems and addresses the complex opportunities, challenges, and risks in managing the planet's natural resources. Once more his recommendations substantially contribute to our understand of the subject and his proposals offer realistic and sustainable solutions to complex issues.

Our world is growing rapidly. By the year 2060, the United Nations predicts that the world's population will reach 8.9 billion people, all of whom will be using the world's natural resources in one form or another. Natural resources have the potential to affect us all. When they are scarce and valuable like diamonds, they can positively transform the poorest countries, such as Botswana, but if abused, they can breed conflict and tear nations apart, as we have seen in the Congo.

In *The Plundered Planet*, Professor Collier writes about the dauntingly complex issues surrounding the global management of nature and focuses on what he believes to be the two defining challenges of our time: restoring environmental order and eradicating global poverty. He believes that natural resources are the key asset of the poorest countries and, if managed responsibly, will power their ascent to prosperity and eliminate poverty. Yet the challenge is that those seeking prosperity are often driven to plunder the very resources that will help them to prosper. The key, then, is to chart a balanced course between unchecked profiteering, on the one hand, and environmental romanticists who believe in scaled-back consumption, on the other.

Some time ago, [Rachel Carson](#), one of the leaders of the environmental movement, said that the human race is challenged more than ever before to demonstrate our mastery, not over nature, but of ourselves. As custodians of valuable resources, Professor Collier understands this; as he writes, "We are ethically obliged to pass on to future generations the equivalent value of natural assets that we were bequeathed in the past. In the end, the decision must be founded on a proper sense of responsibility toward the global poor and the future, not pure self-interest."

Please join me in welcoming a man who deeply cares about tomorrow and the generations to come, Paul Collier.

Thank you for joining us.

Remarks

PAUL COLLIER: Thank you very much for inviting me back. I remember the last occasion was really enjoyable.

These introductions always terrify me rigid. You missed the most inappropriate award I got in 2008, which was that the Queen made me a Commander of the British Empire. Anybody who has read anything about what I've written will know that's the last thing on earth I wanted to be.

Let me make a clear claim for *The Plundered Planet*. I think it's my most important book. At the moment, I actually think it's my best book, but that's for you to judge. But I'm sure it's my most important book, because it deals with something that is really important—nature, natural assets and their mismanagement—and it tries to build common ground between the disputed territory between environmentalists, on the one hand, and economists, on the other. For years they have been sort of cats and dogs, and whilst we've been arguing, we've both been losing the key battle. Natural assets, natural liabilities are being grossly mismanaged. And they are hugely important.

There are two big holes in governance. I should say that natural assets and natural liabilities really depend upon governance to avoid plunder. I'll come to what plunder is. But there are two big holes in governance.

One is in the countries of the "bottom billion," where governance is weak, and so even the natural assets and liabilities within their territories are being mismanaged. That's hugely important for them, because, as I'll show, they are the big assets, the big opportunities of these societies. They have the most potential to lift these societies out of poverty. So that's one big hole in governance.

The other big hole in governance is that an awful lot of natural assets and liabilities are not actually just within the national territory of any government. They straddle territories. They are the atmosphere—carbon, the natural liability, analytically just like natural assets. You just change the sign. They are the fish of the oceans. They are the natural resources that lie beneath the Arctic and the Antarctic and beneath the oceans. Don't forget, more than two-thirds of the earth's surface is outside the territory of any national government. Until recently, it hasn't mattered very much, because we haven't had technology to access the natural assets beneath the oceans or beneath the poles. Now we're getting that technology.

Who's going to own those natural assets? Who's going to control the emission of natural liabilities? We just saw yesterday an opening move in the Arctic, which is a nice little deal

between Norway and Russia. They were both very happy to have grabbed territory that didn't belong to either of them. No wonder they were able to reach agreement.

Let me first confront that emotive word "plunder" that sits boldly in the title of the book, and which I started by saying that without governance we get plunder. I try and give a precise economic meaning to that highly emotive word. What does it mean to plunder natural assets and natural liabilities? It means two things.

- One form of plunder, which is kind of obvious to everybody, is when the few expropriate natural assets that should belong to the many. Natural assets have no natural owners. Nobody made them. With manmade assets, the process of making them kind of defines the property rights. With natural assets, the ownership rights are up for grabs, especially in the low-income countries of the bottom billion. What we have seen repeatedly is that form of plunder—the few expropriating what should belong to the many.
- The other form of plunder is a little bit more subtle. It's where the present expropriates what should belong equally to the future. After all, natural assets have come through to us because previous generations didn't burn them up. So the future has rights which we need to respect.

I think economists and environmentalists can learn from each other. One key insight that economists can learn from environmentalists is that natural assets are indeed special. Economists in our models—let's think in terms of the rights of the future, how we should respect the future. That has really come to light in economics, in terms of climate change, where the issue is very much how you balance the interests of the future against the present.

All the economic models use an ethical framework which is sort of Mickey Mouse utilitarianism. Unless you are familiar with the economic models of climate change, you will fall about laughing if I describe what the ethical framework of intergenerational utilitarianism is like. It's equal weight for every person who might ever live, unless they're rich. If they're rich, then at the margin an extra dollar buys not very many utils, so they don't count for much, and then you just maximize the total number of utils you can possibly get.

This is the ethics of Disneyland, frankly, because no society on earth has an ethical framework remotely like that, which is why economic modelers despair of humankind actually taking the right decisions and then just want governments to override popular opinion. In a democracy,

governments shouldn't, and normally won't, override popular opinion. The whole premise that we can't trust the ethics of ordinary people is misguided, in my view.

The ethical framework used in economics makes no distinction—and I should say, in that framework between the present and the future in utilitarianism—whether the assets are natural assets or whether they are your lifetime's earnings makes no difference. In that sense, utilitarianism is kind of radical communism. Never mind how the stuff's made; you just spread it equally. It's all very noble, but it's mad.

So let's take this insight from environmentalism and say natural assets are special, and they're special because, unlike other assets, they don't have natural owners. We, as the present generation, do not have unlimited rights over natural assets. We do, in a sense, have unlimited rights over the things we have made ourselves. We can choose to bequeath them, but we can choose not to. But with natural assets, we just don't have the right to burn them all up. The future has property claims over those assets the same as we do.

That's, I think, where any environmentalist would say yes. The next move that environmentalists make is wrong. This is where they can benefit from economics. The next move that environmentalists make—and not all environmentalists; the romantic wing of environmentalism. I want to make a distinction between the sort of aristocratic, romantic wing of environmentalism and the pragmatic wing of environmentalism. The aristocratic, romantic wing says that our job is to preserve. That is our ethical responsibility, to preserve nature in the style to which it has become accustomed. What is our role? Our role is that of the curator. Nature is in the glass case in the museum and we are the curators of nature.

That view is, I think, fundamentally wrong and fundamentally at loggerheads with the fight against global poverty.

So what would an economic insight be that would challenge that position? It's to say, yes, nature is special, the future has rights, natural assets are valuable, and the rights of the future are to the value of those natural assets. Our obligation is to pass on at least equivalent value to the future of any natural assets that we inherit, but not necessarily the same assets. If a poor society—take a society like Nigeria—if it can take oil out of the ground and convert that oil into schools and ports and factories so that future Nigerians are prosperous instead of poor, then that's good. The responsibility is to pass on value. We're custodians of value, not curators of artifacts. That's the key ethical proposition in *The Plundered Planet*.

Now, I should say that that ethical proposition echoes in lots of different cultures. Let me just

sketch a few.

It's very close to the Christian concept of stewardship. You should take the Parable of the Talents [a talent is a unit of money] in Luke—if I can remind you of the Parable of the Talents, the rich man leaves talents with his servants, goes away, comes back, and one of the servants has literally preserved the talents. He has wrapped them up. He unwraps the talents. Then he's told by his master—he's chastised, in the words of the Bible. Instead of being praised, he says, "Oh, no, you've not got it. That's not what I meant."

The servants that are praised are the ones who invested the talents and turned them into more.

So the ethical framework in Christianity of stewardship is very close to the idea that you pass on value, not the artifacts themselves.

If you turn to a radically different culture, Islam, the best guide to what the populations in Islam think is in Kuwait, which is the one democratic Islamic society. What have they done? They have used their oil to invest in a fund for future generations. So there was a society which democratically recognized, within an Islamic framework, that, yes, you have the right to take the oil out, but, no, you haven't got the right to burn it up in consumption.

If you move to Africa, which is the territory I'm familiar with—take Zambia, which hasn't done that. They took the copper out of the ground and haven't left anything. Does that demonstrate that Zambians think ethically differently? Not a bit of it. What ordinary Zambians think about this is that their government has behaved shamefully. As one of my Zambian friends said to me, "When the copper runs out, what will our children say about us?"

So across many different cultures, this ethical framework of a responsible use of nature seems to resonate.

That's the ethical position.

Let me have a few remarks about the use of natural assets, first, in the poorest societies, in the bottom billion, and then the mismanagement of the internationalized natural assets and liabilities in our own societies.

For the poorest societies natural assets are their lifeline to prosperity. Let me give you the one little nugget from The Plundered Planet that I guarantee you'll remember in a year's time. First we're going to look at the rich world in its entirety—all the countries of the [OECD](#) [Organization

for Economic Co-operation and Development] –and we're going to look at the average square mile of the rich world. I want to tell you, underneath that average square mile there are subsoil assets worth about \$300,000. That's the rich world.

Now we're going to move to Africa and we're going to take the average square mile of Africa. Now we're going to look underneath it. We're going to look at the value of subsoil assets in that average square mile.

I know it's breakfast time, but you're going to tell me, rather than me telling you. I'll give you the choice. The figure for Africa could be less than the OECD or it could be more than the OECD. You're going to vote on it.

Who thinks the figure in Africa is less?

Who thinks the figure in Africa is more? [Most of the audience raises their hands]

There's only one person who is right. This is why you'll remember it. Not only are you all wrong, but you're all very wrong. The figure for Africa is about \$60,000.

Why is that? If you think about it for a moment, it's massively unlikely. The OECD is a quarter of the world's land surface. Africa is almost another quarter. You are taking two huge slices. In fact, I could have given the figures for the bottom billion as a whole instead of Africa. Two quadrants of the earth's land surface—radically different averages, massively unlikely. The geological process that produced these subsoil assets happened millions and millions of years ago. This is before hot and cold, and wet and dry. This is the geological formation of the earth. The idea that two quadrants would have that—I cheated. The figures I gave you were for known subsoil assets. I tried to find the figures for unknown subsoil assets. I couldn't find them.

What's going on here is, of course, the averages will be much the same. There has just been a lot less discovery in Africa so far. Now, with high global commodity prices, that missing \$240,000 per square mile is going to be found, by hook or by crook—and probably by crook.

What are the implications of that? A key implication is—when you all put your hands up for more, natural assets are already the big story for Africa. Multiply by five to get from \$60,000 to \$300,000, and you've got the likely magnitude of the flows of resource extraction that are going to happen over the next couple of decades. The financial implications of this for the bottom billion are huge. These flows will dwarf all other financial flows—aid, remittances, private financial flows. They will all be dwarfed by this wave of resource extraction. And, of course, many

countries which are now not resource-rich will become resource-rich through the discovery process.

So the challenge is to make sure that the sad history of resource extraction in the bottom billion is not repeated. There's a downside to this. But what I really want to stress is the huge potential upside.

How is that upside to be harnessed? One major part of the book is to set out the decision chain involved in harnessing natural assets for sustained prosperity. The assets have got to be discovered. One little implication of the figures I've just given you is that so far the discovery process has gone radically wrong.

Once they are discovered, enough of the revenues have got to be captured by the society, through the budget. Otherwise, it's the few stealing from the many. My goodness, that second stage has gone radically wrong. I'll give you one little number. It's from the Democratic Republic of the Congo [DRC], which is neither democratic nor a republic. I discussed these numbers with the finance minister from the Democratic Republic of the Congo. It's about gold exports.

Estimates of gold exports—and they are only estimates—are of the order of \$1 billion a year. These are Financial Times figures. Revenues into the treasury of the DRC from those gold exports —\$37,000. It's breathtaking, what's going on, the mismatch between the revenue outflows and what's actually coming in.

So that second link in the chain has gone wrong.

So the discovery process, the capture of value for the society.

Then the third link in the chain is avoiding the plunder of the future, because these revenues are not sustainable. They're coming from depleting a natural asset. The future has rights in those assets. So a lot of the revenues need to be spent on accumulating other assets. Very often that hasn't happened.

I have just been doing the figures for Nigeria, since its discovery of oil until 2003, when my friend [Ngozi](#) came in and changed things. In that first 33 years, the savings rate out of oil revenues was, at a maximum, 10 percent—at a maximum, 10 percent. A more realistic figure would be more like zero. But whether it's 10 percent or zero, it's the same message. The future was being plundered. The first thing Ngozi did was to slam up the savings rate. I just met with the new Nigerian finance minister a couple of days ago. The first thing he wanted to talk about was, "Are we saving

enough? How do we save more?"

So that's the third link in the chain, savings.

Related to that, saving what? There's one model out there, which is the Norwegian model. The Norwegians send it to New York, the money. That's actually a very sensible thing for Norway to do, because Norway literally has more invested capital per worker in Norway than any other country in the world. So using their oil to get yet more capital per worker in Norway just wouldn't be very productive. They're doing better by buying world capital.

But, of course, the countries of the bottom billion are at the other end of the spectrum. They are desperately short of capital, and so they shouldn't be investing in world capital. They should be investing in capital in their own societies. Fifty governments have asked Norway for advice, and they are the countries which shouldn't be following the Norwegian model.

Now we come to the final link in the chain, which is, if you're going to invest domestically, how do you do it? One reason why these countries are so short of capital is that they have very, very inefficient investment processes. This is what the IMF [International Monetary Fund] refers to as absorptive capacity limits. The IMF is right. But it's wrong to stop at saying, because there are absorptive capacity limits, don't use it in the country. The right answer is to say, do what it takes to raise absorptive capacity. Build the capacity to invest productively. That's what I refer to as "investing in investing."

So here's this whole decision chain, from the discovery through taxation, savings, and the ability to invest. That decision chain not only has to hold—it's a weakest-link problem. If any link in that chain breaks, you've got plunder in one form or another. Not only does the whole chain have to hold, it has to hold repeatedly, for at least a generation. That's the sort of timeframe to get from poverty to reasonable prosperity. So how can that decision chain hold again and again and again?

I'm going to park that question and spend a few minutes on international assets. Then we're going to come to the same question: How? And I'm going to come up with a common answer.

The internationalized natural assets and liabilities—in the book I have a chapter on climate change, carbon. I have a chapter on fish. I have a chapter on agriculture. I'll talk a little bit about fish. Until I wrote that chapter, I really knew very little about fish. What I learnt just horrified me.

It's very simple. The fish swim in the oceans. Sometimes they swim in the seas of territorial waters, sometimes outside territorial waters. Until a few decades ago, there was no problem.

People would go out and fish, and the technology of fishing was such that you would catch a fish and you would eat it. That's fine. The fish reproduce. We've now got a technology where, if everybody goes and does that, there will be no fish. As the number of fish go down, by the time it's no longer economic to go and find them, the fish can't find each other.

In fact, I learnt just a couple of days ago that the way fish find each other is by sound, not by sight. There's so much noise pollution in the oceans now, they can't even hear each other.

This is a modest problem. You would think, if this problem isn't within the reach of global governance, what is?

The entire global fish industry is about an \$80-billion-a-year industry. It's taking natural assets out of the seas, worth about \$80 billion. Some of that is what economists call rents, the rents on natural assets. If we take a barrel of oil out of the ground, it costs about \$7 to get it out of the ground; it's worth about \$80, so the rents are about \$73. With fish, the rents are less dramatic. If we fished efficiently, then the rents might be about a quarter of the value of the catch. So with an \$80-billion-a-year industry, we should be getting about \$20 billion in rents.

To whom should that accrue? Who owns fish, the fish of the high seas? In a sense, nobody owns them. They're just a natural asset. They might as well belong to everybody, in a sense. There's no particular reason to let the rents on fish accrue to the people who catch them. Their costs and profit on capital and risks should accrue to them, but not the—just as the rents on a barrel of oil don't accrue to the oil company which takes them out of the ground, that \$73—they get the \$7—the same with fish. In an ideal world, it would be a flow of about \$20 billion of taxation a year accruing to mankind, in some way or another. Instead, what we are doing is subsidizing the fishing industry to the tune of \$30 billion a year. So instead of getting a check of \$20 billion, we are writing a check of \$30 billion.

What does the fishing industry do with that check of \$30 billion? It goes and plunders fish. So we are actually paying for the extinction of fish.

Now, it gets worse than that. At least you might hope that somebody is benefiting from all this—namely, fishermen. But they're not. Take the American regulation on the fishing industry. We regulate the catch in such a spectacularly inefficient way. We limit the number of days that the fishing industry can go and fish. We limit it spectacularly—two or three days a year. What then happens is that fishermen invest in an awful lot of fishing boats, so that, for those two or three days a year, you go catch fish. That means that the rents and the subsidies are dissipated in a fishing fleet which is vastly too big and which is nearly all the time idle. It also, incidentally,

produces this scramble of a lot of fishing in a very short time, which is hugely inefficient. You then catch all the wrong sorts of fish and kill them off.

So even a simple natural asset like fish, we're making a spectacular mess of. If we can't do fish, what hope for carbon, which is much harder?

What's the answer? The answer is not to just put governments in a room and get those governments to negotiate. We have been trying that for years. The fruits of intergovernmental negotiation have diminished year by year. There's far less successful intergovernmental cooperation now than there was a decade or two decades ago.

What's the solution, both to that first problem—how does the decision chain hold in the bottom billion, so that they can harness their natural assets? And how do we overcome the problem that governments have lost the ability to cooperate, even on blindingly simple things like fish, let alone the more difficult?

The answer is that, whilst the ability of governments to behave well is diminished, the ability of ordinary citizens to understand issues and act collectively has increased enormously in the last decade, through the power of information technology. Once information is made available, the costs of accessing it have fallen a lot and the costs of coordination have fallen. Let me give you one example, which I steal from [Clay Shirky](#). It's the example of China, not a government which we think of as being terribly responsive to its citizens.

You remember [the earthquake a couple of years ago](#), where a lot of schools fell down and killed school children because those schools had been so shoddily built. They had been shoddily built because of corruption in local government. Within 48 hours of that happening, ordinary Chinese citizens had done three things. They had found out why their schools had collapsed, they had found out who within their local government had taken the bribes that meant that the schools were shoddily built, and they had organized amongst themselves street protests to hold those officials to account.

There's a wonderful photograph on the Web showing a Chinese local government official on his knees before a crowd of angry parents.

My point is, if that sort of pressure can happen in China two years ago, think what could happen in less repressive societies in a decade or so. Citizens are going to get more power to hold governments to account. I don't want to overemphasize that, but I think that's the trend of the future.

Citizens are also, I believe, able to grasp the ethics, the simple ethics, of a responsible attitude towards natural assets and liabilities, as I sketched earlier. This ethical position is not eccentric, in the way that utilitarian economics is eccentric, nor is it a minority position, in the way that the aristocratic, romantic environmentalists want us to curate everything. The ethics of preserving and handing on value is common to a lot of societies.

So we can trust citizens to take the right ethical position. We can increasingly trust them to exert power on government. The missing link is that at the moment we can't trust citizens to understand, as it were, the economic issues involved in natural assets and liabilities. People don't understand what's happening to fish. They don't understand the decision chain in harnessing natural assets for prosperity. They don't understand carbon. It has become a blame game—who's to blame for it, and who should pay?—rather than looking at what an efficient and fair solution will look like, a world that's using carbon prudently.

So the battleground is in the battleground of ideas and information. We have to lower the costs of truth, essentially. That's why I wrote *The Plundered Planet*. Please read it.

Questions and Answers

QUESTION: You mentioned China. There's an issue that is of obvious concern about China, because it doesn't necessarily fall into either category. But its activities in Africa are of increasing concern. I would be interested in your observations on that.

PAUL COLLIER: I'm going to give you two answers.

One is, China in Africa—it's a two-edged sword. They bring much needed competition, and that's potentially very healthy. At the moment, that competition isn't really being realized, because the Chinese are operating on a different approach from other countries. Their approach has been deals in which they do resource extraction in return for infrastructure. The response so far of the international community has been to say, "Don't do that. Pay for the resources, and then, if you want to build infrastructure, get the government to buy the infrastructure." Of course, the Chinese are not very responsive to that finger wagging.

Let me put it to you that if I was a finance minister in Africa, I would be quite tempted by this package deal, because it's a lock-in mechanism. Suppose I'm a responsible finance minister. I want to protect the interests of the future. I know that if I sell the natural resource-extraction

rights for money and the money goes into the budget, I've then got to get it out of the budget and use it for assets. I'll be one voice, and around that cabinet table there will be the minister of defense looking meaningfully at the president and saying, "The army's restive." There will be the minister of education saying, "The teachers know there's money coming in. They're on strike." There will be a lot of different claims.

It's quite tempting for finance ministers to say, "Actually, we've got to lock in to some investment."

So the real problem with the Chinese model, I think, is not the nature of the deals; it's that they are monopolists. They are the only people offering that deal.

What I suggest in the book is that maybe, instead of wagging our finger at China and saying, "Don't do it," we should go to China and say, "Wonderful. You've innovated a new idea. Where governments want to do this, let's all do it." And so we offer to African governments, "If you want infrastructure in return for natural resource rights instead of money, that's fine. Run an auction."

Part of the book is a plea for more auctions of natural resources, because auctions have this double advantage. They get round the agency problem—that is, the corruption problem. With a transparently run auction, it's much harder to cheat. And they get round the asymmetric information problem, the fact that resource-extraction companies know so much more about the true value of things than governments. If you've got three or four resource-extraction companies bidding against each other, it doesn't matter if the government knows nothing. Inadvertently, the auction will reveal true value.

So that's my answer.

Let me also answer the role of China in the international natural assets. Let me make a prediction here that is a pretty bold prediction. It's a position in *The Plundered Planet*. It's this: We're going to see a sea change in geopolitics. The geopolitics of the 21st century will increasingly be about international public goods. I think climate change is just paradigmatic of a whole class of problem which will be about the supply of international public goods.

The fundamental problem with the supply of international public goods in a world of 194 countries is free-riding. For most countries, the sensible, the rational thing to do is free-ride. There are only five countries in the world that cannot free-ride, because they are too big. They know that if they don't do it, nobody else will. The whole idea of free riding is that you say, whether I do it will make no difference to whether it happens or not. There are only five countries that cannot say that: America, China, India, Europe (if it manages to be one), and Japan.

Those five countries—I call them the G5. We have had G-this, G-that. But I think the real structure of the world is going to be the G5.

The G5 face a common problem: They are too big to free-ride, everybody else is small enough to free-ride, and if everybody else free-rides, the G5 are in trouble, because those public goods won't be there. So the G5 will face a common problem of how to use carrots and sticks to persuade everybody else. It's about the G165—and they are not a G, because the other people don't act collectively. But the G5 are going to have to act collectively.

It's a hard leap to imagine, but the G5 are going to find themselves increasingly on the same side in international problems, and so they are going to have to learn how to work together. Of course, the next decade or two will be a very bumpy ride, because this flies in the face of history. India and China won't cooperate with each other. They both want to see themselves as victims vis-à-vis Europe and America. Europe likes to posture that it's the good guy and America isn't. There has been a lot of historical baggage that we'll have to—but that's all it is. It's historical baggage. The basic structure of the problem is that these five are going to have to learn to work together.

There's one really nice implication. These five are so different one from another that I can't think of a single issue on which the G5 have an interest which is in their interest, but is not aligned with the global interest. The only things on which they will be able to cooperate are the things that are actually in the global interest. I describe that as being "bullies for good."

So two answers on China.

QUESTION: You have also, among many other things, studied aid effects, particularly in Africa, the poorest countries in Africa. I have been working very much with aid issues during my professional life. I'm tempted to ask you, what is your assessment of development aid in terms of managing natural assets, particularly in Africa? Are we learning? Are we doing any better? What should be done in order to have the aid effective in this field?

PAUL COLLIER: That's a good question. As natural resource revenues rise, the financial importance of aid kind of diminishes. Also, of course, the leverage provided by aid diminishes. Nobody can tell Angola what to do. They have enough money that they'll do whatever. The international community needs to learn to use a wider range of instruments than just money. Money has a role, but increasingly that money needs to be used, first, to build the information, lower the costs of truth.

One of the things I describe in *The Plundered Planet*—the thing I'm sort of the most proud of over the last couple of years—is an idea I floated in *The Bottom Billion*, that we should, as an

international community, try and build something called a natural resource charter, which would lay out this decision chain of how to harness natural assets, build it as a website, and make accessible information for the societies of the low-income/resource-rich countries.

Enough people read *The Bottom Billion* that many people have said, "That sounds like a good idea. We could do that." And so a group of people came together, and we did it. The head is [Ernesto Zedillo](#), the former president of Mexico, who said, "I've seen oil wreck Mexico. I don't want it to wreck anywhere else." We got [Mike Spence](#), the Nobel Laureate, in the group. We got [Mo Ibrahim](#).

It's entirely a civil society effort. Donors have started to put money in. They don't buy any control at all. All they do is support funding for staff and so on.

You can all look at it. It's on the Web now, naturalresourcecharter.org. That's an attempt to lower the costs of information, both to governments and to ordinary citizens. What we're trying to do is set off a sort of wildfire process of spreading that around these societies.

So that's one example of where money can be useful.

The other is building the capacity to invest well—investing in investing. That costs money. Often governments start from a position where the last thing they prioritize is actually the thing they most need. Targeting a little aid to build that capacity to invest well is money well spent.

QUESTION: I have a regional question. I'm thinking about river systems in Africa, in the Nile. Here you have Egypt, Ethiopia, Sudan. There's a lot of history there. It is a cross-generational resource. How do you think they are doing with that? Are there any good models sounding all of the themes you are touching for river systems?

PAUL COLLIER: That's spot-on. These are regional public goods, and regional public goods in areas where you have national governance problems. In a sense, they are doubly difficult, because they require intergovernmental cooperation. They have all the problems of the international public goods, but because they require cooperation between governments that themselves have very weak governance, they have all the problems associated with the internal management of natural assets in the bottom billion. So you actually have two hurdles to overcome.

But there's no substitute for—basically, the solution is going to be the same: Build a common understanding.

I think, over the last decade or so, that has started to happen. The big enemy of a common

understanding of the genuine economics of the issues, the big enemy which is also going to be the big enemy in a lot of international cooperation, will be the siren calls of nationalism. In our own societies, one big element of misunderstanding of nature is coming from the aristocratic, romantic environmentalists. In the emerging market economies, romantic, aristocratic environmentalism is not an issue at all. You can't find that anywhere. But what you can find are the siren calls of nationalism.

So there will be, I believe, a battleground fought in the emerging market economies between the common ethics of a responsible attitude towards natural assets versus the siren calls of nationalism. And that will be a battle that's played out in China, in India, across the board, I think—and, very clearly, in the river systems, where each country can posture its national interests. That has to be faced down.

QUESTION: This question might relate in some way to your last answer. Looking at Africa, there may be enormous opportunities to develop the natural wealth of Africa, but that natural wealth may not be fairly distributed among the various African nations. Nigeria may find much more oil, but Chad or Mali might find nothing. No matter how responsible the Nigerian government might be in using the revenues from that oil, that's not going to help the people in Mali or Chad. What do you do about that?

PAUL COLLIER: You're absolutely right. Africa is split up into 53 countries, the African landmass. That means you have built-in inequity. The lucky people of São Tomé and Príncipe, 100,000 people sitting on oil; Ethiopia, 70 million-odd people, no oil, no nothing.

I don't think there's anything we can do about the subsoil natural assets. I think the best we can hope for is indeed to say these natural assets belong to all the citizens of a country. I'd like to be able to say they belong to all the citizens of Africa equally, but that's overreach. It's hard enough to get to the statement that they belong to all the citizens of a country equally. I'll tell you why: Because the real threat comes from subnational claims. Wherever the stuff is found, the local community says, "It's ours."

Here there is a danger of an unholy alliance between the romantic environmentalists who love the words "local" and "community" and the rights of indigenous people—they are saying, "Local, local, local," and the resource-extraction companies, if you think about it—at the moment, you think of environmentalists and the resource-extraction companies as completely at loggerheads. But one thing they can agree on quite happily is that, actually, the rents from the resource extraction, instead of accruing to the national government, should accrue to the locality, because the resource-extraction companies just want tranquility in the vicinity of the extraction of the resource rents. So there's an unholy alliance in the making which says, "Local."

We see that not just in Africa. There are going to be big discoveries in Northern Canada, and the claims of the local indigenous community. Just because you paddle your kayak several thousand feet over somewhere where there's an oilfield does not give you the rights to own that oilfield. But that's going to be the claim.

QUESTION: Would you comment, please, on agriculture and the continuing debate about genetically modified [GM] seeds and the foods that perhaps could feed a population more efficiently?

PAUL COLLIER: I will indeed. I have a whole chapter on it. I've not had a chance to refer to it yet, so thank you very much.

I have a chapter called "Nature Misunderstood." It's part of this argument that the big enemy is going to be popular misunderstanding of anything to do with nature. One of the reasons for popular misunderstanding is that nature is so intrinsically sort of romantic that citizens easily get muddled into the romance of nature and then their position is kind of abused by lobbying interests. We have seen that most clearly in Europe on genetically modified crops. [Prince Charles](#) is passionately against GM crops. If you wanted an aristocratic romanticism environment personified, I'm afraid it's Prince Charles. I'm terrified that somebody will elevate me from being a Commander of the British Empire to being a knight, in which case he gets a chance to thrust a sword at me.

What happened in Europe was this unholy alliance between the aristocratic, romantic tradition that has contempt for the commercial and the industrial, and which has this love affair with the organic peasant, and the NGO [non-governmental organization] world, which is very schizophrenic—it wants development, but it doesn't want to disturb the organic peasants in aspic—plus the agricultural protectionists—wow, they're strong in Europe—plus, what's also strong in Europe, anti-Americanism: "My God, the crops are coming from an American corporation."

So you've got this very powerful alliance in Europe, which blocked GM crops. You've also got the health freaks, which are there.

So Europe shot itself in the foot with the ban on GM. Then the disaster was that Africa then shot itself in the heart, because Africa is still in thrall to European thinking, all these years after independence. So what Europeans banned, Africa banned. That was a disaster for Africa. Africa, with rising population, with deteriorating climate, needs rapid crop adaptation more than anywhere else in the world. It has this huge vulnerable agricultural sector, and it needs crop adaptation.

So I have been fighting the fight within Africa to wake up. Just because Europe shot itself in the foot, for all these ludicrous reasons, none of which should resonate in Africa, you don't need to shoot yourself in the heart.

Having said a few words about Europe, let me say, America has got its own fantasies on agriculture—biofuels. You're being held up by a scam. It's a very expensive scam—the idea that you can break free of dependence upon Middle East oil by growing your own fuel. The figures I've seen to counter that are that if you used all your food for energy, it would supply 8 percent of your energy needs. Actually, that's wrong. It would supply 100 percent of your energy needs, because if you used all your food for fuel, you would all be dead. So you've been sold a scam.

I'm advocating what I call "mutual de-escalation of folly." Europe wants you to back off the biofuel scam and you want Europe to back off the GM ban. Europe and America have been making deals for 60 years. Here's an easy win-win deal.

JOANNE MYERS: I thank you for being the custodian of our values. Thank you for coming.

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