

**Ian Lowe's address at the launch of Doug Cocks' book: "Deep Futures" on 12 August at the National Museum, Canberra.**

(*The Museum lies on the other side of Lake Burley Griffin from Parliament House. The Chair was Brian Walker, former Chief of CSIRO Wildlife and Ecology, now CSIRO Sustainable Ecosystems*).

Mr Chair

In a sense it is ironic that we are meeting almost within sound of the division bells to consider future issues because you don't hear a lot about the future in the nation's Parliament which is supposed to be discussing where we're going. So, given that the only mention of future generations that I've heard in the Parliament in recent times was the pretentious and superficial Intergenerational Report tabled as part of last year's Budget papers - a mix of economic trivia and pop sociology - I think it's appropriate that we're redressing the balance by having some discussion of the nation's future and its future in what we hope will be a civilised world.

I was given the title: "First we have to survive the 21st century" and, you'd have to say that if you were a gambler, you wouldn't back us with stolen money because we still show no sign as a species or as a civilisation of even recognising the scale of the problem, let alone developing solutions.

The second report in the UNEP series Global Environmental Outlook said: "Our present course is unsustainable - postponing action is no longer an option." And in ecological terms I don't think there's any doubt that we're booked on the Titanic and steaming towards the icebergs. Unfortunately, those who put their faith in growth are still effectively tipping more coal into the burners and encouraging us to meet the icebergs more rapidly. And a group of people who should know better are still in the First Class bar ordering smoked salmon and the best vintage champagne secure in the knowledge the cheque will not reach the bank.

Doug's book is, I think, an appeal to steer a different course and effectively an incitement to mutiny to those of us who think that those on the bridge are not listening. In those terms, I think it is a welcome move forward.

It's clear, I think, that there are serious problems about surviving even the next hundred years. We face problems of resource depletion; environmental damage; a world that is less equitable and consequently less stable; the collapse of traditional religions leaving a cultural and spiritual vacuum which is no basis for a long term future; and above all else, what a conference that you and I attended, sir, called "the pressure of the increasing expectations of a growing population in a globalising, human-dominated world".

I'll unpackage each of those problems briefly in turn.

In resource terms, I used to say that pessimists feared that the peak of world oil production might only be five years away, and optimists thought it might be as far away as 20 years. The series which began in last week's *New Scientist*, has drawn my attention to the fact that the pessimists believe that the peak of world oil production was actually in the year 2000 and that we are already on the downhill slope. There are still optimists who think that it might be 10, or even 15 years, away but there is no substantial disagreement with the geological fact that the peak of world oil production, if it hasn't already happened, will happen in the life-time of most of us, and after that we'll see the real show for which the 1970s was an out-of-town try out, coming soon to a planet near you. Make sure you sit comfortably because a long run is assured - a world in which oil becomes steadily scarcer and more

expensive and in which we have to fundamentally change the basis of our energy use, particularly for transport which is implicitly posited on the assumption that there will always be cheap, readily available petroleum fuels. There is no energy shortage - the natural flows of solar, and geothermal and wind energy are orders of magnitude greater than any conceivable future energy demand, but we show no sign of a concerted move towards using those infinite energy flows rather than those which our grandchildren will curse us for having frittered away. In extreme cases, we even fuel vehicles and drive them around in circles just to see which one can go the fastest and some places actually find people prepared to pay money to watch the degrading spectacle.

There are, of course, other resource problems. Tony McMichael has already reminded us that about one fifth of the human population do not have access to fresh drinking water. We know that agricultural land is being lost to salinity and degradation in this country and elsewhere. The second Australian State of the Environment Report said that urban air quality is improving but all of the other serious environmental problems are worsening: the state of our inland rivers, the loss of biological diversity, the state of our rural land, increasing greenhouse gas emissions and so on. It said the fundamental reasons why the problems are worsening are that the pressures on our environment are still increasing: the combined pressures of a growing human population and increasing demands per person. And it's a reminder that neither at the local, nor the regional, nor the global scale do we have any convincing strategy for coping with population growth, indeed, most decision-makers show no sign of seeing that population growth is even part of the problem. I've recently been in both South Australia and the Northern Territory where decision-makers publicly lament the fact that their population is either stable or only growing slowly. Within living memory a premier of Queensland, a man whose name for the moment escapes me, used to say: "They coming every week, thousands of them. They coming to Queensland!" And while the syntax is better these days, the logic hasn't really moved on. Most politicians still see population growth, either as a desirable end in itself, or as a tribute to their sound management, or both. In fact, it's clear that we can't conceive of a sustainable society in which the population of one species grows without limit. The human population *will* be brought into balance with natural systems, either by starvation, disease, and fighting amongst ourselves, or, by civilised choices. And it seems to me we ought to be aiming for the latter rather than the former.

Similarly, demands per person have to be stabilised or reduced if we hope to live in a stable society because, in the world in which we live, the gap between the materially wealthy and the materially poor is growing every year. The prospects for stability are diminished, not just by the growing gap, but by the fact that the cultural hegemony of the United States and their ubiquitous film and television, means that the poorer of the world are reminded every day of their material deprivation by being shown the scale of material waste in the richer parts of the world. I don't believe we can be secure doing property deals on our mobile phones in large cars in a world in which the majority of the human population have never ridden in a car, never made a telephone call, and never owned property. A sustainable world has to be a more equitable world.

In a sense, even the Australian Bureau of Statistics hinted at that without drawing the conclusion by joining up the dots, when they launched their report last year: *Measuring Australia's Progress*. In their headline indicators for the 1990s, they showed that throughout that period all of the economic indicators were positive, the social indicators were mixed with some very worrying negative trends, and all but one of the environmental trends got worse. In other words, if you join up the dots, the increasing economic production of Australia has come at increasing social and environmental cost. And that exposes the vacuity of the view, which I am afraid is still common across the lake, that all our problems can be solved as long as we have a booming economy - that it's alright to trash the environment to get wealthy because then we'll be able to afford to clean up the environment.

It's clear globally that we face very serious environmental problems as well. The GEO reports have pointed to the loss of biodiversity and the fact that the *lowest estimates* of the rate of species loss still place us in the middle of the sixth major extinction event of the planet; the lack of access to fresh water; our interference in the carbon cycle, most recently manifest by the fact that there is warmth sufficient to incite people to swim in the United Kingdom; our interference in the nitrogen cycle which will probably be seen in the long term to be more serious than our interference in the carbon cycle because it is greater in magnitude; and the fact that we are producing, every year, hundreds of millions of tonnes of toxic wastes for which there is no chemical solution except to isolate it from the biosphere and hope that it stay isolated.

The global change science meeting, Mr Chair, which we attended in Amsterdam, pointed out that human activities are now affecting global systems in complex, interactive and apparently accelerating ways, and that because of our numbers and the scale of our technology, we have the scope to alter natural systems in ways that threaten the very processes and components on which we depend. There is a very real worry, for example, that climate change could disrupt the North Atlantic circulation system, and produce profound and *irreversible* changes in the world climate.

So what might we do in the future? There have been various attempts to sketch out scenarios or plausible stories of the future. I've been profoundly affected by the report of the Global Scenarios Group called *Great Transitions*. They sketched out a range of possible scenarios. They're distinguished by the dominant responses to social and environmental challenges, for example, the first scenario they developed was called *market forces* and it relies on the self-correcting logic of competitive markets to respond to problems. Their *policy reform* scenario depends on government action to secure a sustainable future. In their *fortress world* scenario, we rely on the armed forces and police to impose order and protect the environment and prevent a collapse into another scenario called *breakdown*. The final scenario they explored called *the great transition* envisages a sustainable and desirable future emerging from new values, a revised model of development, and the engagement of civil society. They concluded that market forces, which is implicitly the scenario which we are following at a global level, cannot even in principle lead to a sustainable future because it inevitably produces widening inequity and environmental degradation, and those two forces will undermine the social stability and international cohesion needed for the working of effective markets. The most likely result of following a market forces approach is a slide into either *fortress world* - and some would say that we are already several steps down that slippery slope in which the wealthier and more powerful nations use military might to provide their access to the world's limited resources and try to insulate themselves from the growing insurgency outside - and equally plausible possibility is the breakdown of the systems that we attribute to a civilised world.

In principle, the *policy reform* scenario could cut resource use and environmental impacts. The problem is, discerning the political will for such a strategy, given what the report calls, "the resistance of special interests, the myopia of narrow outlooks, and the inertia of complacency". I note only locally that the consensus reports of the National Strategy for Ecologically Sustainable Development still gather dust in government pigeon-holes 12 years after the Council of Australian Governments adopted the National Strategy, with no sign of the political will to implement even measures which were supported by consensus ranging from Greenpeace, to CRA and Caltex. In a sense it's vindication of Paul Kennedy's view in his book *Preparing for the 21st Century* that politicians will never take concerted action now in the interests of the future as long as they can argue that 'experts are divided', or 'that more research is needed'. And the problem with complex issues of the interaction between social and natural systems is that the experts will always be divided and it will always be possible to

argue that more research is needed. As long as politicians are more concerned about the next election than the next generation, I don't think we can expect policy reform on the scale that's needed.

So, market-led wealth generation and government-guided technological change has to be supplemented by a values shift towards a new global vision marked by equity and marked by durability. So I suggest that we should be looking at strategic goals, like stabilising the population, eliminating hunger which doesn't require technical advances, it simply requires a more equitable distribution of the two kilograms of food per person per day we now produce, and a dematerialisation of society. It's worth noting that several European nations have now adopted the goals sketched by the Wuppertal Institute of reducing energy use to a quarter of the present level and reducing material use to 10 per cent of the present level, and they see those as realistic targets rather than the stuff of science fiction. But above all else, we need a values shift, perhaps away from *Homo sapiens*, which is gendered and a link back to our past, towards what my partner calls, based on Pentti Malaska's idea, *Globo sapiens*, the idea of being wise citizens of the planet recognising that we share it with all other species and that we hold it in trust for all future generations. And that means that we need to see the economy as a *means* to service human needs rather than end in itself, and that we are probably committed to *genuine* globalisation rather than the current fad of simply reducing the constraints on corporations.

We have to see, I believe, that growth in itself, is not a solution. The Brundtland Commission pointed out 15 years ago that the two main causes of environmental degradation are extreme poverty in the poor countries and unsustainable levels of consumption in the rich countries. Growth can in principle do something about the first problem; but growth is both in principle and in practice making the second problem worse unless we embrace a different sort of growth which is oriented towards human need rather than human greed.

We were invited to "lift our noses from the grindstone and our snouts from the trough" (although I note the snouts disappeared in the shorter version for today's audience) and that image reminded me of the fact that the fundamental problem is still that most decision-makers are operating under what could be called the pig-headed model of the world, of which the world is seen like the head of a pig, in which the economy is seen as a large shape like the face of a pig and society and environment are minor protuberances like the ears of a pig. And if you have that world-view, it actually makes sense to say that the economy is the be all and end all, and the minor problems of society and environment can be handled as long as the economy is going 'gang-busters'. If you think about it, the only rational model is one that accepts that the economy is a part of society, a very important part, but only a part, and that our society is totally enclosed within natural ecological systems on which we depend for breathable air, drinkable water, adequate nutrition, a sense of cultural identity, spiritual sustenance and so on. We tend to behave as though we are not part of natural systems but I remind myself that every molecule of my body was once part of the natural systems of this planet, and indeed every molecule of my body will, in time, once again, be part of the natural systems of this planet.

So we need to accept that our social and economic planning should be within an ecological framework, that we do need planning and conscious decision-making, rather than trusting the magic of the market which cannot even in principle represent the interests of other species and future generations. So we need new social institutions; we need new technologies to meet our needs; but above all else we need values for a sustainable future based on the principle of *Globo sapiens* and continuous adaptive management based on social learning.

And just in conclusion, I can see, that even in a friendly group like this, there are people who see that all as a bit utopian, and in one sense it is, but I wanted to end by reminding you that *all* of the

significant social reforms have been seen at the time as utopian. Two hundred years ago it was utopian to be advocating a world without slavery, and indeed those that were advocating it were told they were unrealistic because no economy could function without slave labour. A hundred years ago it was utopian to be urging votes for women, and those who did so were openly persecuted. Closer to our present time, twenty years ago it was still utopian to be dreaming of Berlin without the wall, or South Africa without apartheid, or laptop computers, or mobile phones, or for that matter, good coffee and civilised licensing laws in Queensland. In fact, if you think about it, practically all features of modern life were once utopian visions and we have them because people of previous days were *not* content with the world in which they lived, but worked systematically for a better world. And in those terms, just as those who thought long term and those who had a moral conscience felt obliged two hundred years ago to be working to end the slave trade, I believe those of us who are thinking of future generations have a moral responsibility to be working for a sustainable future.

In those terms I welcome Doug Cocks' book as a sort of Lonely Planet Guide to the Future that tells us places where we can eat with a clear conscience and a safe stomach; a place where we might lay our head; and dangers for the traveller to avoid. It's a reminder that we're all creating the future, and if we're not part of the solution of a move to a sustainable world, we are, in the phrase of the sixties, part of the problem.

Thank you very much.