

Rio+20: where it should lead



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Rio+20: where it should lead

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Green Alliance is a charity and independent think tank focused on ambitious leadership for the environment. We have a track record of over 30 years, working with the most influential leaders from the NGO and business communities. Our work generates new thinking and dialogue, and has increased political action and support for environmental solutions in the UK.

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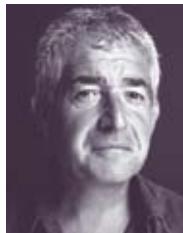
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Matthew has been director of Green Alliance since May 2010 and has 25 years' experience of UK and international environmental issues. Prior to Green Alliance, he was head of government affairs at the Carbon Trust; campaign director at Greenpeace UK and founder and chief executive of the renewable energy agency Regen SW, where he developed Wave Hub, the world's first proving ground for wave energy farms. Matthew was a member of the Renewables Advisory Board 2005-10 and currently sits on the Department for Energy and Climate Change's Carbon Capture and Storage Development Forum. Qualified as an environmental biologist, he spent the early part of his career working on tropical forest conservation.



Mike Clarke
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Mike Clarke was appointed chief executive of RSPB in 2010, having been their operations director since 1998. He has worked at RSPB for more than 20 years, initially in South East England tackling a wide range of land use issues. Prior to his time at RSPB, he worked for the Nature Conservancy Council in Hampshire and the Chief Scientists Team, where he contributed to the geological conservation review and the national vegetation classification, and carried out research with the Soil Survey of England and Wales. He is a member of the independent panel on forestry policy in England and a council member of BirdLife International, a global partnership of conservation organisations. He was a member of the government's England forestry forum, has served on Southampton University's council and was a director of the North Bedfordshire Schools Trust.



Tony Juniper sustainability and environment adviser

Tony Juniper is an independent sustainability and environment adviser, a senior associate with the University of Cambridge Programme for Sustainability Leadership and a special adviser with the Prince's Charities International Sustainability Unit. He advises international companies, both in a personal capacity and as a founder member of the Robertsbridge Group. He writes extensively and his new book *What has nature ever done for us?* will be published in January 2013. He is a former director of Friends of the Earth.



Rt Hon Nick Clegg MP deputy prime minister

The Rt Hon Nick Clegg MP is deputy prime minister and leader of the Liberal Democrats. He studied social anthropology at the University of Cambridge and continued his postgraduate education at the University of Minnesota and the College of Europe in Bruges. After a brief spell in journalism, Nick worked on international aid programmes and trade policy at the European Commission. He was elected MEP for the East Midlands in 1999 and served as Trade and Industry spokesman for the European Liberal Democrat and Reform Group, until his decision to step down from the European Parliament to focus on domestic politics in 2004. He worked as a business consultant and part time university lecturer before his election as MP for Sheffield Hallam in 2005. In parliament, Nick served as the Liberal Democrat spokesperson on Europe (2005-06) and shadow home secretary (2006-07), before becoming leader in 2007. In May 2010 he became deputy prime minister and lord president of the council in the coalition government. Nick has contributed to a large number of articles and books, including on education, European Union reform, and trade liberalisation.



**Ian Johnson
secretary general, The Club of Rome**

Ian Johnson was elected secretary general of The Club of Rome in 2010. He has over 30 years experience in economic development. He spent 26 years at the World Bank working on energy, water, environment and economic management issues. He was vice president for sustainable development for eight years and was also chairman of the consultative group on international agricultural research (CGIAR). Prior to the World Bank he spent five years in Bangladesh working on rural development and water supply programmes. Since leaving the World Bank he has held a number of senior and advisory posts in the public and private sector as well as with the United Nations.



**Sir Brian Hoskins
director, Grantham Institute
for Climate Change**

Sir Brian Hoskins is director of the Grantham Institute for Climate Change at Imperial College and Professor of Meteorology at the University of Reading, where he has been for 40 years. He has had numerous national and international roles. Currently, he is on the board of the Met Office, where he is chair of its scientific advisory committee, and he is a member of the UK Committee on Climate Change. He is also a member of the science academies of the UK, USA and China, and has received a number of awards in the UK and internationally. He was knighted in 2007 for his services to the environment.



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Alistair McVicar is currently pursuing a doctorate with the Grantham Institute for Climate Change at Imperial College. His PhD is in the fields of geophysical fluid dynamics and climate science. It focuses on the small scale features in the southern ocean and utilises the Imperial College ocean model, Fluidity-ICOM. His background is in physical oceanography and he was awarded a masters in oceanography from the University of Southampton. Prior to his PhD Alistair worked for Hydraulics Research Wallingford. He wrote on energy efficiency as an energy adviser on the Parliamentary Office for Science and Technology (POST) fellowship scheme.



Paul Polman
chief executive officer, Unilever

Paul Polman became chief executive officer of Unilever in January 2009. Prior to joining Unilever he held senior roles at Procter & Gamble from 1979 and Nestlé SA from January 2006, as well as executive vice president for the Americas from February 2008. Paul is a member of the executive committee of the World Business Council for Sustainable Development, as well as sitting on the board of the Consumer Goods Forum, where he co-chairs the board strategy and the sustainability committees. In addition, he is a member of the European Round Table, the International Business Council of the World Economic Forum, and the Swiss American Chamber of Commerce. Recognised by Investor Magazine as chief financial officer of the year 2007, Paul received the Carl Lidner award from the University of Cincinnati in 2006 and was the WSJ/CNBC European Business Leader of the Year 2003. He has been awarded honorary degrees from Northumbria University, UK, in 2000 and the University of Cincinnati, USA, in 2009.



Barbara Stocking chief executive, Oxfam GB

Barbara Stocking joined Oxfam GB as chief executive in May 2001. She currently spearheads Oxfam's new global GROW campaign. She regularly contributes to global development debates. In 2011 she spoke on the panel of the Food and Agriculture Organisation (FAO) and at the G20 presidency high level meeting on the Horn of Africa drought, at the FAO Committee for Food Security annual meeting and at the World Food Day Ceremony at the UN Headquarters in New York. She is also a member of the Business 20 (B20) task force on food security. Until recently she was a member of the FAO high level external committee on Millennium Development Goals. In 2010 Barbara was appointed as a non-executive director of the Cabinet Office Board, and as a member of the Foreign Secretary's advisory group on human rights. Barbara is a member of the Steering Committee for Humanitarian Response (SCHR), an alliance of nine major international humanitarian organisations, and was its chair from 2008-10. She was awarded a CBE in 2000 and a Dame Commander of the British Empire (DBE) for humanitarian services in 2008.



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Tara Rao was until recently a senior policy advisor at WWF International, and prior to that WWF UK, working on policy advocacy for climate resilient development, poverty and environmental governance, and with multi-constituency and civil society organisations. Her experience includes social and environmental research, strategic planning and architecture. She has worked with bilateral and multilateral development organisations and NGOs on equity and diversity in natural resource management and rural development; corporate social responsibility; participatory organisational learning and development; and social infrastructure design and planning. She has worked long term in India, Vietnam, Nepal, Bhutan and Denmark, as well as in Laos, Uganda, Tanzania, the Netherlands and South Africa. Tara is the lead author of *Building an equitable green economy*, a report commissioned by the Danish 92 Group Forum on Sustainable Development, which aimed to provide a southern perspective on the green economy. Her piece in this pamphlet is drawn from that document.



**Matt Williams, Isobel Tarr and Sarah Arnold
co-directors, UK Youth Climate Coalition**

Matt Williams, Isobel Tarr and Sarah Arnold are co-directors of the UK Youth Climate Coalition (UKYCC). Matt is a masters student at the University of Cambridge, reading development studies. He helped to found the UKYCC three and a half years ago, and he also works and volunteers for a range of third sector organisations, including RSPB and Concern Universal. He is currently founding ThinkClimate, an intergenerational justice think tank. In his spare time he's a wildlife photographer.

Isobel Tarr focuses on UKYCC's UK projects. She studied history, literature and cultures of the Americas at the University of Warwick, looking at histories of social change. She's been a youth delegate to the United Nations Framework Convention on Climate Change and also dabbles in non-violent direct action. She works as a support worker for adults with learning disabilities.

Sarah Arnold works on UKYCC's international projects. She is currently studying for an undergraduate economics degree at Edinburgh University, with a particular interest in environmental concerns. She has also been a youth delegate to the United Nations Framework Convention on Climate Change.

Introduction

The case for sustainable development

Matthew Spencer, Green Alliance
& Mike Clarke, RSPB

Sustainable development: easy to say, harder to define, difficult to do. The shared ambition is clear: to live within our means and pass on our planet to the next generation in a better state. But 20 years on from the first Earth Summit we still have not found the means to deliver it. We believe the Rio+20 Earth Summit can reinvigorate the global conversation about sustainable development. A commitment to developing Sustainable Development Goals should be one of its most significant outcomes, unifying development and environment goals, and building trust between the north and the south. This should be the lasting legacy of Rio+20: a shared commitment to decoupling economic growth from unsustainable and inequitable exploitation of the natural environment.

The Rio Earth Summit in 1992 was the first comprehensive global attempt to change course. Looking back at the coverage, the contrast between the passion and high expectations of its participants, and the low expectations of the 2012 conference is striking. Tony Juniper's piece in this pamphlet evokes the heady atmosphere of 1992 and, even though progress was not as significant as he hoped it would be, the original summit had real impact. A galaxy of world leaders participated and a battle for control of the sustainable development agenda ensued between the US as 'sole superpower' and almost everyone else. George Bush Snr flew in, to be accused of bullying and intransigence, whilst UN officials expressed anguish at the open conflict between southern and northern governments about who was to blame for damaging the earth.

"One of the most positive voices to emerge over the past 20 years has been that of progressive business, whose tone and aspirations are increasingly aligned to those of the NGO community."

The run up to Rio+20 has been an altogether more muted affair. Very few people are expecting binding decisions to emerge from the conference, and there are no new international conventions on the table. But the absence of hard negotiations does leave more room for dialogue and alliance building. As the contribution from Unilever's Paul Polman illustrates, one of the most positive voices to emerge over the past 20 years has been that of progressive business,

whose tone and aspirations are increasingly aligned to those of the NGO community. In particular, many have rallied around the concept of a global framework for sustainability reporting, as a means of cementing the role they can play in sustainable development. And, as Nick Clegg sets out here, building buy in to this concept is one of the deputy prime minister's three priorities as he heads to Rio.

What is harder to judge is which part of the sprawling set of issues being discussed will emerge with political and public salience in both the UK and internationally. The green economy narrative is riding high in developed, northern countries, where it seems an obvious way of embedding sustainability in the minds of political and business leaders preoccupied with economic crises and recovery. But not all agree. Tara Rao, of FairGreenSolutions, argues that a green economy narrative will only work for developing countries in the south if it has equity at its heart.

When it comes to international summits, the issues that enjoy the greatest profile do not always fare well. The run up to the 1992 conference was dominated by concern about the loss of tropical forests. The shocking decline of biodiversity in the tropical regions since then shows how little progress we have made. It reflects both the weakness of the Biodiversity Convention and the real difficulties of getting international traction on national and local resource decisions. The continuing decline in natural capital has prompted Ian Johnson, secretary general of The Club of Rome, to consider in his piece how we can re-engineer our economies to better value and protect the resources that we depend on. Making progress on 'GDP plus' and indicators that value natural resources is another of the UK government's three priorities.

There has been progress where national or regional political imperatives have coincided with the Rio agenda. Many countries have implemented ambitious renewable energy policies as part of their desire to create more diverse energy portfolios, as well as to reduce their climate impact. Northern world consumers have begun to rediscover the habit of thinking of waste as a resource, in the face of rising costs and the development of recycling and recovery infrastructure.

Perhaps the greatest progress has been made in alleviating extreme poverty in some parts of the world, most notably in Asia. The fact that much of the economic activity that has helped lift people out of poverty has come with environmental damage is self-evident, even if it is dwarfed by the impact of developed world lifestyles. But Oxfam's Barbara Stocking argues persuasively that this is not inevitable. Many of the basic needs of the poorest can be met most easily with renewable or low resource inputs.

This chimes with the case being made by organisations like ours; that it is only by focusing on a resource efficient and low carbon transition that we will secure genuinely sustainable development and economic stability. Aiming simply to get back to business as usual will make it very likely that the economically troubled north will find any new growth choked off by rising fuel and material input prices, and that progress on poverty eradication will be undercut by the impacts of climate change.

"It is only by focusing on a resource efficient and low carbon transition that we will secure genuinely sustainable development and economic stability."

Many commentators highlight the potential of Rio+20 to provide the thinking space in which to consider complex challenges about securing green growth in a way that works for all, better valuing resources in economic decision making and reinvigorating global commitment to the pursuit of sustainable development. We, too, hope to see this. In particular, the conversations at Rio+20 about creating Sustainable Development Goals (SDGs) are likely to be one of its most important opportunities, and commitment to developing them one of its most significant outcomes. They offer perhaps the best prospect of unifying development and environment goals in a tangible way, and building trust between the north and the south about why it's in everyone's interest to promote sustainable economic development. This must be one of the lasting legacies of Rio+20: a shared commitment to decoupling economic growth from unsustainable and inequitable exploitation of the natural environment.

1

What's changed since Rio 92?

Tony Juniper

sustainability and environment adviser

What did Rio feel like in 1992 and what has changed? Why has optimism been replaced by inertia and will the green economy narrative help to overcome this? With only modest expectations for Rio+20 evident, **Tony Juniper** signals where we should be looking for progress.

Being at the June 1992 Earth Summit in Rio is one of those experiences that is hard to forget. It was the largest gathering of world leaders ever to take place. Alongside the thousands of campaigners and advocates, many global icons were in town too, from James Bond actor Roger Moore to the Dalai Lama.

And what a place to have such a meeting, with the opulent beachfront apartments laid next to some of Latin America's largest shanty towns, and all set against the backdrop of dramatic hills clad with some of the last fragments of Brazil's fast disappearing coastal Atlantic rainforests.

The unprecedented attention that the 1992 summit attracted was in part down to the increasing prominence of various ecological challenges. A hole had been discovered in the earth's ozone layer. Pictures of burning rainforests were being beamed into TV sets. People were also beginning to hear about climate change. And there were various poverty related disasters in the headlines, not least in Ethiopia, where the cruelest famine of modern times had taken a heart-rending toll on the poor people caught in its midst.

The increasing prominence of these and other issues was accompanied by various international data-gathering and technical processes. These included the Brundtland Commission on Environment and Development and a new climate science body called the Intergovernmental Panel on Climate Change (IPCC). It was a time of rising awareness and concern, and the Rio summit was to be the lightning rod that channelled the huge energy unleashed by the emerging scientific knowledge about the scale of the issues and their impacts and growing public awareness about the need to act.

I arrived in Rio de Janeiro, with colleagues from Friends of the Earth International, to persuade negotiators and ministers to take the decisive action needed. Looking back at those two weeks in June 1992 some remarkable things happened, not least the fact that six agreements came out of the summit, three of which were major, legally binding conventions: on climate change, biological diversity and desertification.

Looking back to that moment, and with the benefit of hindsight, the first Rio summit was clearly a major landmark although, it has to be said, it didn't seem like that at the time. In our view, the climate change convention was woefully inadequate, the one on biological diversity was not much better, and the agreement on desertification was too weak to make much difference.

“Looking back to that moment, and with the benefit of hindsight, the first Rio summit was clearly a major landmark, although, it has to be said, it didn’t seem like that at the time.”

The elaboration of various protocols and decisions that have emerged from the annual or biannual convention meetings over the past twenty years mark some forward momentum. But it is remarkable how the energy that took the world to Brazil in 1992 has been progressively sapped, to the point today where it is normal for major summits to agree not very much at all. The deadlock that emerged at the

climate change negotiations last year in Durban is a case in point. After years of disappointment and failure, with the collapse of talks at Copenhagen in 2009 as perhaps the most obvious and spectacular example, countries basically threw in the towel in Durban and decided to start again.

The fact that momentum has diminished in this way is all the more remarkable considering the state of knowledge back then as compared with now. In 1992 climate science was far more equivocal than today, yet countries felt sufficiently confident about what it said to enter into a major new agreement. Now the science is far stronger, but countries are paradoxically less likely than ever to agree to anything. Why has momentum stalled as the size of the challenge becomes ever more apparent? I believe there are several reasons.

One dynamic in play arises from the pushback that increases in proportion to the certainty of the scale of the problems at hand. The more certain the challenges become, the more immediate and fundamental become the changes needed to meet them. Those changes, regarded by some as negative and as intimidating by many, are resisted. This manifests itself in the way that some countries, companies, free market think tanks and various commentators enter into different forms of denial as to the veracity of the climate science. The pushback does not arise from genuine concerns about the accuracy of the science, but more the clash of world views that is thrown into relief by discussions about the action needed to respond to it. This, in turn, reduces the chances of political agreement.

“The more certain the challenges become, the more immediate and fundamental become the changes needed to meet them.”

Even when there is consensus on the problems at hand, the post-Rio processes have been dogged by more and more complexity. It was hard enough to agree the original texts. But in the years that followed, as countries tried to work out what the texts actually meant, never mind elaborating them in the light of new information, agreement was harder and harder to find. The complexity was made worse by the many different circumstances faced by the different countries around the table, from the very rich to the very poor, and from the very powerful to the very weak. And conditions are not static. Some countries, particularly Brazil, Russia, India and China, have found their circumstances and prospects change radically over the past 20 years, with the wealth and prosperity they are now much closer to reducing their willingness to lock themselves into agreements that may restrict their ambitions.

Added to this is the inertia of business as usual. The world and its economies, politics and societies are geared up to work in certain ways. Everything from our prevalent culture to the nature of our power and transport infrastructure was shaped by a world different to the one that lies ahead. Changing things at these basic levels is complicated and has major practical ramifications. This too pushes back against the actions that might ideally be agreed, for example in regard to limiting global average temperature

increase to no more than 2°C of warming, compared to the pre-industrial average.

Then there is the absence of leadership. Few western countries have actually delivered on the funding or environmental targets agreed at Rio in 1992 or since then. This leaves many of the emerging economies wondering why they should change their development pathways when those who they see most responsible for the problem have not delivered.

Such is the backdrop for the summit that marks the 20th anniversary of the historic 1992 meeting. So what now?

In the wake of a global financial crisis and economic slowdown, the sustainable development agenda has recently undergone some level of reframing. It is summed up in the concept of the 'green economy'. Economic crises have always pushed environmental issues down the political agenda. To get them back up the agenda under the present circumstances will logically require some more obvious linkages into growth and economic recovery.

For those active on sustainable development since the original Rio summit, and indeed before then, the idea of a green economy is not new. The notion that development and economic strategy needs to be integrated with environmental goals has been obvious for some time, with hundreds of reports and conferences demonstrating the clear potential in the stimulation of more sustainable economic sectors.

The idea has now undergone rapid reheating, with various international agencies and technical processes publishing reports and convening meetings to raise the profile of the opportunities

embedded in greener economies. So, should we expect a breakthrough of some kind? I certainly hope so, but more likely we should expect the emergence of familiar sounding words of encouragement with little of substance to actually accelerate the growth of a global green economy.

Aside from the difficulties set out above in relation to why momentum has diminished internationally, in the UK we can see quite clearly why the idea of the green economy might struggle. Despite various pre-election rhetorical flourishes from David Cameron and Nick Clegg on opportunities for joining up green goals with economic recovery, they have simply not delivered and have, in several respects, gone into reverse.

For example, various policy choices have cut the speed of expansion in renewable energy and, thus, the contribution the sector might make to economic recovery. The main blockage in this respect is the Treasury. Senior figures there, including the chancellor himself, see environmental goals as a drag on growth and development and have resisted calls for more joined-up decisions at almost every turn.

Thankfully this mindset is not shared throughout the world and some countries, including South Korea and China, have seen action to green their economies as an opportunity to enter a new global market. But the fact that opinions diverge even on the motherhood-and-apple-pie idea of a green economy is somewhat troubling.

Despite some gloomy portents for the likelihood of making rapid progress on the green economy, it might be that talks in Rio could lead to the possible future agreement of Sustainable Development Goals

(SDGs). These would replace the Millennium Development Goals (MDGs), which have focused mainly on combatting poverty, rather than the environmental dimensions of sustainability. This idea has the potential to create positive traction between now and 2015, when the MDGs come to an end. But even if such a new framework for international co-operation does begin to take shape, its impacts will not be felt for some time.

“An increasing number of businesses understand the challenges of sustainability and are getting on with the job of doing something about it.”

If I am right to hold only these rather modest expectations for Rio+20, does that mean we should abandon hope? Well, of course not. What it does mean, however, is that it might be time to put more effort and imagination into those avenues for change that might deliver in other ways. I suggest three priorities to be getting on with.

The first is to get sustainable development and environmental issues back on the agenda within individual countries, including here in the UK. If countries don't see the sense of action at home, then there is little chance that they will lead globally.

When politicians don't see the importance of a subject it is often politics, rather than appeals to commonsense or giving them more data, that is most likely to get their attention. This is why it would be a good idea to plan now a campaign in

key marginal seats where environmental issues can be made more prominent by environment and conservation groups. In many seats the combined members of green groups are more numerous than the voters who made up the majority of the sitting MP at the previous election. That dynamic could be harnessed to get issues on the agenda before the next general election. It would require the green groups to get some teeth, however, and to really engage in politics rather than urging candidates to sign up to general pledges that they can ignore when they win power.

A second area for more concerted action is among private sector companies. An increasing number of businesses understand the challenges of sustainability and are getting on with the job of doing something about it.

They are more numerous than they used to be and exist now in most sectors. Is it possible to find ways to help expand the market share of those who are taking action at the expense of those who are not? I think it would be, and on a sufficient scale in some highly competitive sectors, supermarkets for example, to encourage the laggards to up their game. The ones who are moving in the right direction, and reaping rewards because of it, could also be mobilised to challenge the claims of those politicians who still see a choice between environmental goals and economic ones.

The third priority is perhaps the most challenging of all. It is about finding ways to reconnect people with the realities of how the earth works. A fish and chip shop owner who is taking steps toward more sustainable sourcing recently told me that he has had people in his shop who didn't know that the fish in

fish and chips actually comes from fish. With increasingly urban populations isolated from nature, is it any wonder that this kind of ignorance feeds into politics, and that this, in the end, is the ultimate reason why Rio+20 is unlikely to deliver what is needed?

“A fish and chip shop owner who is taking steps toward more sustainable sourcing recently told me that he has had people in his shop who didn’t know that the fish in fish and chips actually comes from fish.”

For all the challenges, I remain optimistic about what can be achieved in the years ahead. I will not be going to Rio+20, however. I will instead put my energies into making the case for the green economy here in the UK. I will continue to help the leading private sector companies and I will do my best to raise awareness about what we are up against, and what needs to be done to fix it.

I wish Rio+20 every success, but having been at the summit 20 years ago, and at many of the meetings since, it seems to me that now is the time for bottom up pressure to help fill the vacuum that is increasingly evident at the top.

2

Three UK priorities

Rt Hon Nick Clegg MP
deputy prime minister

Nick Clegg will head to Rio+20 with three priorities in mind, along with the weight of expectation from environment, development and business stakeholders. He acknowledges that the world may not have moved as fast as the original delegates in 1992 may have hoped, but he sets out his plans for securing commitment to three areas of progress at Rio+20.

The 1992 Earth Summit was a turning point. A landmark. Suddenly world leaders were making the link between the environment and development. It resulted in real, global action, including the birth of the UN Framework Convention on Climate Change and the Convention on Biological Diversity.

But what has happened since? With Rio+20 round the corner, where I'll be leading the UK's delegation, we need to ask ourselves how far we've come and what else we need to do.

In many ways, the world has taken big steps forward. There has been progress on alleviating poverty. In every region of the developing world, the percentage of people living on less than \$1.25 a day has declined. We've seen significant improvements to access to water, education and healthcare too.

Yet, the world has not moved on as far as the original Rio delegates might have hoped. Some of the environmental indicators show worrying signs. The rates of biodiversity loss have increased. As, in many places, has desertification due to increased demand for resources. The impact on developing nations has been acute: damaging agricultural productivity and threatening food supplies.

As for economic growth, despite some progress, wealth remains concentrated and the benefits have not been universally felt. Around 1.4 billion people still live in extreme poverty. Those who were the poorest 20 years ago are still the poorest now.

With the world's population dramatically increasing, our challenges are only going to grow. By 2050 there will be nine billion people

living on this planet. In less than 20 years' time we'll need 30 per cent more water; 45 per cent more energy; 50 per cent more food. How do we produce it all without further damaging the environment? How do we eradicate poverty and drive up living standards while living within our environmental means?

“The UK will be pushing our international partners on three key priorities: signing up to Sustainable Development Goals to drive action; GDP plus; and getting businesses doing their part through corporate sustainability reporting.”

The answer has to be sustainable growth. Hence one of the Rio summit's most important theme is building the green economy: eradicating poverty, protecting the environment, meeting our future needs, and ensuring prosperity can be felt by all.

For our part, the UK will be pushing our international partners on three key priorities: signing up to Sustainable Development Goals (SDGs) to drive action; GDP plus; and getting businesses doing their part through corporate sustainability reporting.

Sustainable Development Goals

First Rio+20 must agree to develop SDGs. These must be small in number and focused on helping

people out of poverty. They need to lock in agreement and commitment to delivering water and food security as well as massively expanding access to sustainable energy. These are the fundamentals. They need to complement, not undermine, the existing Millennium Development Goals (MDGs) and feed into the post-2015 framework on international development. More than that, the SDGs that come out of Rio should create renewed momentum to work towards MDGs and beyond.

After Rio, the UN secretary-general will appoint a high level panel to develop the post-2015 framework for international development. This will be co-chaired by Prime Minister David Cameron, President Susilo Bambang Yudhoyono of Indonesia and President Ellen Johnson Sirleaf of Liberia. We want goals where eliminating world poverty and the Rio agenda go hand in glove. It is common sense that they are linked. Exactly how we work them into a coherent global approach will be for the high level panel to discuss with partners around the world.

GDP plus

The limitations of GDP as the only measure of progress have long been recognised. A country can grow financially richer yet simultaneously destroy the natural capital on which its future prosperity depends. This amounts to cashing in the planet and it needs to stop. Economic growth is necessarily a priority for all countries, but this growth should enhance well-being. We need to move beyond a model in which progress is measured solely on the basis of short term narrow financial gain and toward a broader measure around the quality of growth.

Some countries, including the UK, Netherlands, China and India, are already taking steps towards

this, but it is not standard practice. A real shift is needed to encourage countries to put sustainability fully and effectively at the heart of government decision making, and to provide them with the tools to do it.

“A country can grow financially richer yet simultaneously destroy the natural capital on which its future prosperity depends. This amounts to cashing in the planet and it needs to stop.”

That means creating growth indicators which, for instance, look at the value of standing stocks of woodland and clean water. The UK’s National Ecosystem Assessment estimated the value to our economy of the role wetlands play in improving water quality as £1.5 billion. The UK is also blazing a trail in terms of embedding natural capital in the national accounts. The coalition government has committed to having done so by 2020. We are calling on others to do the same.

Sustainability reporting

Of course, it is clear that action by governments alone will not be enough. Rio+20 needs to bring business into the fold, helping to deliver a greener economy through the ways we trade, innovate and invest.

So we aren’t just calling for governments to commit to GDP plus, we need businesses to think along these lines too. We want the Rio declaration to call for a

global framework that will really move this agenda forward, bring the wide range of initiatives out there together, and make reporting of sustainability within a company's report the norm, not the exception. This is no mean feat. Many countries are resistant to such an agreement and we need to ensure that NGOs, business and government work together to ensure it is delivered.

In the UK companies are changing how they do business, putting sustainability at the heart of what they do and reporting on this progress. We welcome the initiatives that businesses such as Aviva are leading on sustainability reporting. We need people to sit up and take notice of these initiatives in Rio, and to follow suit.

“The UK is clear: we need to show leadership and we need to be ambitious, for developed countries, as well as those that are developing, and for this generation, as well as all those who follow.”

I support British businesses doing more in this area, especially in countries where water, food and energy are lacking, creating business opportunities that are truly sustainable and good for development. The Sustainable Energy for All (SE4All) initiative is a good example and UN Secretary-General Ban Ki-moon should be congratulated for promoting it. At a recent meeting in London of the SE4All panel that I hosted, I announced that the UK will provide

£25 million to support this global public-private partnership initiative. If a strong action plan comes together, I hope we can double that.

So, three priorities and three clear ideas of what we want to achieve; an agreement to develop SDGs, the development of GDP plus growth indicators, and calls for a global framework on sustainability reporting. Three steps towards sustainable development and the green growth on which real prosperity depends. The UK is clear: we need to show leadership and we need to be ambitious, for developed countries, as well as those that are developing, and for this generation, as well as all those who follow.

3

New economics for a new world

Ian Johnson

The Club of Rome

The green economy narrative is a new focus for the Rio negotiations. But its ability to support human progress and protect the planet depends on the degree to which our current economic model is fit for purpose. **Ian Johnson** questions whether it is and examines how it could be re-engineered to value nature, to reconsider what constitutes wealth and economic success, and to be better suited to meet the social and environmental challenges of the 21st century.

As the Rio+20 negotiators gather in June they will face a broad agenda. High on that agenda will be the green economy: the need to redirect our economies and economic growth towards sustainability. The wording of the negotiating texts will be vague enough to find political support almost anywhere and this will sit well with ministries of finance, most of which will not attend the meeting and will feel little or no real commitment to its outcome. Efforts to mitigate the legitimate concern of developing countries, that the green growth agenda represents a new form of conditionality, will broaden the definitions and scope even further. A text will, no doubt, be drawn up with sufficient flexibility to allow for anything to pass for green growth. Everyone will leave happy and satisfied with the result: another tick in the box of environmental diplomacy.

Yet we face an enormous challenge: that of redirecting economic growth away from the current unsustainable models to new and daring approaches that are both human centric and explicitly recognise that the planet is finite. Rio+20 is another key opportunity to sort out the idiocies and contradictions of the economic growth model that we have pursued for the past half a century. But unless bold moves are made, that opportunity will be missed. A lick of green paint here and there, an increase in renewable energy targets and marginal efficiency improvements will do little to change our current economic paradigm.

The foundations for modern economics were built when the world was dramatically different from today. Current economic theory rests on assumptions that were made over 200 years ago and many are no longer valid. Economics has lost its way. It may not

yet be broken, but it needs a serious overhaul and the sooner the better. It is neither supporting real wealth creation in the 21st century, nor is it facilitating the creation of the markets, policies and instruments that will guide us towards long term sustainability. It is timely to rethink and change our ways. Where might we start?

Recasting growth and wealth

Economics is based upon a false system of accounting that assumes all growth is good. Current measures regard the economic benefits of war, pollution, crime, rising oil prices, terrorism, natural calamities, water scarcity and deforestation as equivalent to activities that promote better nutrition, housing, education, healthcare, physical comforts, social harmony, recreation and enjoyment. National accounts need to be re-engineered to address this.

“Economics has lost its way. It may not yet be broken, but it needs a serious overhaul and the sooner the better.”

We could make a start by ceasing to recognise factors that most of us would deem undesirable, such as crime, social unrest and war, as positive economic contributions and, in turn, recognise the economic value of factors that are perceived as highly desirable, such as the protection of natural habitats. With immediate effect, the costs of the depletion of natural capital should feature in economic accounting. If governments announced that, within five years, all would have new and more accurate national wealth and national income accounts we would have made a start. It can be done and it should be done.

Valuing natural capital

The wanton destruction of the earth's natural capital can be attributed in large measure to the fact that what makes short term financial sense makes no long term economic sense. When ecologists began working with economists an important alignment was formed between ecologists worried about the physical depletion of the planet's natural resource base and economists worried that the destruction was being accounted for as a positive contribution to wealth and growth. The major challenge is to incorporate the real value of natural capital into the public policy and investment decisions being made by the public and private sector.

“If governments announced that, within five years, all would have new and more accurate national wealth and national income accounts we would have made a start. It can be done and it should be done.”

Robust work in this domain has for too long sat on the shelves of academia, rarely reaching the desks of environment ministers and almost never those of finance ministers. Yet the consequences of using incorrect economic values for natural resources can be considerable. The under-pricing of water, for example, is leading perhaps to the largest single global economic subsidy in the world today. And we may be entering a new era of uneconomic oil, where the costs of extraction are far greater than its benefits, once we fully cost the associated environmental and social impacts.

It is time to change. A commitment by governments to start valuing their natural capital correctly would be a good start. Why not create natural capital boards that could independently assess the real value to society of natural resources and then ensure that such values are used for all investment and policy decisions? It may not always be possible to price water at its real resource cost but we can at least take investment decisions that include its real value. The UK has made a promising start in this regard by establishing a Natural Capital Committee; an innovation that needs to be carefully reviewed in Rio.

The economics of pollution

Progress has been made over the past decade on integrating the costs of pollution into calculations of wealth, creating a precedent that efforts to value natural capital can build on. The health related impacts of pollution are now well understood and awareness of the associated economic impacts has also grown. This is having a significant effect on the calculations of real wealth in some countries. Indoor and outdoor air pollution in China, for example, was estimated to have increased morbidity rates and reduced real GDP growth by more than three per cent. Policy measures to establish standards, punish those who pollute through the polluter pays principle, and adopt preventive measures are now commonplace. They can be traced to the effects of a better understanding of the economic impacts of pollution. Progress has been mixed but overall is rather positive in this regard and offers some hope.

In contrast, climate change has been described as the largest market failure in our history. Correcting it requires enlightened global public policy at a level and sophistication never before seen in the world.

Economic instruments are the cornerstone of ensuring an efficient transformation to a low carbon economy. Setting clear price signals for carbon has been absent from the agenda for some time: both a discouraging and ultimately foolish omission.

Beyond environmental economics

Our environment is precious but its management must be balanced carefully with the needs and aspirations of people. In other words, we must manage our natural, social and human capital in a manner that provides the basis for sustained prosperity and prudent management of the planet's resources. Instead, we are witnessing a triple divorce that has disconnected the economy from the fundamental role it is intended to serve.

First is the rift discussed above between the economy and ecology. The blind pursuit of more production and consumption without regard for the consequences, and unbridled growth that takes no account of associated ecological costs, is acting like a cancer that is rapidly destroying the foundations on which human life depends.

Second is the widening rift between production and employment. The aim of raising labour productivity has given rise to an obsession with eliminating labour altogether from the production process, creating a world with ever growing production capacity, while severely limiting the number of people with the purchasing power necessary to avail of it. As a result, global unemployment remains the major social ill of our time. The inability of our current economic paradigm to provide remunerative work for the vast numbers coming onto the job market will result in an erosion of social capital, social

dislocation and increased poverty on a scale we have never seen before.

“Climate change has been described as the largest market failure in our history.”

Third is the rift between finance and the economy resulting in a divorce of financial markets from the real economy. Markets have shifted out of the real economy and into illusory wealth creation with disastrous results for all but a handful of lucky speculators. Investment in the real economy to build the next generation of low carbon infrastructure and provide much needed jobs has been curtailed. Yet \$4 trillion a day of currency trades float around the world, making money for those involved but offering little real world impact. A Tobin style tax on such activities, which would simultaneously dampen speculation and create resources for investment in the real economy, should not be seen as so controversial that some countries have sidelined it. The revenue would provide a much needed boost to the development of new energy technologies. Financial markets must become the servant of the economy and the economy must fulfil its original purpose: serving humanity and enabling the production of goods and services that create a more liveable and peaceful planet, and one that is in line with its natural carrying capacity.

A new economy must heal these rifts, re-engineering the fragmented economic system into a single, understandable and comprehensive whole that works for people and for the planet. We need to question the assumptions that underlie current economics and alter the system of metrics by which

we assess progress, ensuring that valuations reflect the real contributions and the full direct, indirect and inter-temporal costs to human and environmental welfare. The irrational, unsustainable, inequitable and often uneconomic ways in which we deploy, utilise and consume resources must be eliminated. And the policies by which we establish the relative prices of various forms of capital, natural and social, must be changed. We need to review and revamp our concepts and models of growth to ensure they meet the needs of both present and future generations, with particular attention to the future of work and the maintenance of our indispensable and high value natural systems.

A new world

We face a new world. One with increasing demands from those who have not been given the chance to be part of mainstream economic life and have little wealth, real or illusory, to share. One where risk and uncertainty will prevail and where discontinuities and non-linear events will become commonplace, whether in our natural systems, through changes in our climate, or in our social systems, through the continuation of gross inequity. This new world will require us to understand that humans are an integral part of nature and to accept the limitations this will impose. And it is one in which we are all global citizens: what we do affects the world and what others do affects us. The subtle differences between public and private policies and ownership will erode.

To address these challenges, we need a new economy and new economics to guide us through the 21st century. An economy that is fit for purpose. Tinkering at the margins will not move us forward in the direction or at the pace needed. And, as we

reflect upon the key elements of a new economy, we will discover the need for new institutions to support us: markets that provide the real goods and services that people need and can reflect the full value to humanity of the natural capital we use and protect; economic activities that find meaningful, remunerative employment for all; enlightened public policy that embeds the value and public good of nature; and a society that sets priority on meeting needs, not through avarice, greed and speculation, but through enlightened self interest and progressive action. That is the economy of the future.

“Financial markets must become the servant of the economy and the economy must fulfil its original purpose: serving humanity and enabling the production of goods and services that create a more liveable and peaceful planet, and one that is in line with its natural carrying capacity.”

Those gathered in Rio to celebrate twenty years of change must reflect upon the seriousness of the challenges before them. Indeed, if challenges are opportunities, then never before have the opportunities been so great, for never before has humanity faced challenges comparable in magnitude and complexity to those that have emerged in recent times. A major overhaul of current economic thinking and a willingness to

move to a new generation of enlightened institutions should be the agenda for Rio.

“We can do better. We could seize the century. Those at Rio could announce the start of a new progressive dialogue on a new global economy.”

Sadly, it may not turn out that way. As governments haggle and wordsmith over well worn, meaningless texts, the opportunity will be lost once more. A new document will be produced and heralded, but largely ignored. We can do better. We could seize the century. Those at Rio could announce the start of a new progressive dialogue on a new global economy and they could agree practical changes in that direction. It would be a start.

4

The climate challenge

Sir Brian Hoskins & Alistair McVicar

Grantham Institute for Climate Change

Climate change science has progressed considerably since the Rio summit in 1992, with significant growth in the range and robustness of evidence underlining the consequences of failing to take action.

Sir Brian Hoskins and **Alistair McVicar** ask why political commitment to action hasn't kept pace with the scientific evidence, and whether commitments made at Rio+20 will be enough.

Climate developments since Rio 1992

Since the 1992 Earth Summit, CO₂ emissions due to human activity have risen by almost 50 per cent and CO₂ levels in the atmosphere have risen by more than ten per cent. The levels of other greenhouse gases in the atmosphere have also increased significantly. Global temperatures have continued to fluctuate with the natural variability of the climate system, rather than rise continuously. There has been little change in global mean temperatures over the past decade, but smoothing out the natural variability reveals that mean temperatures have continued to rise at about 0.1°C per decade. Global mean sea level has risen about six centimetres since 1992 and is currently rising at a rate of about three centimetres per decade. The melting of Greenland and West Antarctic ice is now contributing at least one third of this rise. Arctic sea ice cover has also been decreasing at all times of year. After smoothing out the year-to-year fluctuations, the minimum area of the ice cover in September has decreased by about 20 per cent since 1992.

In the same period there have been many extremes in temperature, for example the Russian heatwave of 2010 had temperatures in the central region 10°C higher than normal. In the following winter Europe experienced extremely cold temperatures; for example, the UK mean temperatures in December were 5°C below average. Rainfall patterns have also been unusual with major flooding events, such as that in north west Pakistan in 2010, and droughts such as the recent one in east Africa. Whether the occurrence of such events is greater than would be expected in the absence of human interference with the climate system is not clear. However, climate models suggest that this has led to an increased likelihood for many of them.

Climate science since Rio 1992

There have been no discoveries since 1992 that have radically changed the scientific evidence that underpins concerns over climate change due to greenhouse gas emissions from human activity. However, evidence has strengthened and become more robust. More and increasingly accurate observations, longer data sets, improved understanding of physical processes and finer resolution climate models running on higher performance computers have all contributed to a rapid development of climate science.¹ This gave the 2007 Science Assessment of the Intergovernmental Panel on Climate Change (IPCC)² sufficient confidence to state that “most of the observed increase in globally averaged temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations”.

On a global scale there is a greater understanding of the most important feedback processes in the climate system. These include feedbacks associated with water vapour, clouds and small particles in the atmosphere that are thought to determine the climate’s longer term response to increased levels of greenhouse gases. However, uncertainties remain in our understanding of these processes and, therefore, in the projected future global temperatures in different scenarios for economic growth and emissions. The uncertainties for rainfall and other regional variables are larger than for global temperature. But there is a high degree of confidence about the broad characteristics of the changes we expect to see, such as enhanced temperature rises over land, particularly on northern continents in winter, reduced rainfall in dry sub-tropical regions, increased rainfall over the northern continents and generally increased heavy rainfall events.

In the science of complex systems there are many examples where gradual changes in parameters do not cause any notable changes in behaviour for some time and then, suddenly, rapid changes occur. There is considerable interest over whether the earth's climate could behave in this manner as greenhouse gas levels increase. Two of the many possible mechanisms that could eventually lead to rapid changes are the release of methane from the melting of permafrost, thereby adding significantly to greenhouse gases, and the weakening of the overturning circulation in the Atlantic, which brings warm water to the high latitude northern hemisphere. There is also the possibility of a significant reduction in the Greenland and West Antarctic ice sheets over a few centuries, a very short period for such changes, which would lead to global sea levels increasing by many metres over this period. In addition, the Amazon rainforest could irreversibly dieback, which would have huge local implications, and have an impact on the absorption of CO₂ by the earth's vegetation and on the circulation of the atmosphere. More generally, crucial regional atmospheric phenomena could show large sensitivity to greenhouse gas increases beyond a certain level. For example, the summer monsoons, whose rainfalls are vital to many tropical countries, are potentially sensitive in their average intensity or in the variation in intensity between one year and another.

Recent research has highlighted that the extra CO₂ in the atmosphere due to human activity accumulates over many centuries. This means that it is the sum of all the emissions of CO₂ this century that will affect future climate: we cannot just suddenly reduce emissions in, say, 2050 when climate change is seen to be a severe problem and expect the problem to go away.

Climate policy since Rio 1992

The 1992 Earth Summit led to the UN Framework Convention on Climate Change (UNFCCC) under which the Kyoto Protocol was agreed and the recent international governmental meetings at Copenhagen, Cancun and Durban took place. The 141 signatories of the Copenhagen Accord have all agreed that, to avoid dangerous climate change, global warming should be limited to 2°C above pre-industrial levels; the G8 and G20 have also agreed to this.

“We cannot just suddenly reduce emissions in, say, 2050 when climate change is seen to be a severe problem and expect the problem to go away.”

The Kyoto Protocol, which was agreed in 1997 and ratified in 2005, sets mandatory targets for reducing greenhouse gas emissions and shows that international agreements are possible. Even so, this agreement did not halt the continuing rise in global CO₂ emissions. If adhered to, the subsequent Copenhagen Pledges, made by countries in 2009, will produce some reduction in emission levels in 2020 compared with what they might have been. Last December, at the 2011 UNFCCC Conference of the Parties meeting in Durban, it was decided that all countries should work towards an agreement on emission reductions, to be signed in 2015 and become active in 2020. We have yet to see if governments will deliver on this but, for the first time, we now have agreement internationally that

both developed and developing countries will need to take action on mitigation if we are to avoid the worst effects of man-made climate change.

The intersection of climate change policy and science

With the uncertainty due to limitations in our understanding of the climate system it is currently impossible to be absolutely confident that a 2°C target is actually possible to meet. However, many calculations agree that it is likely it can be met if the rise in global greenhouse gas emissions due to human activity slows rapidly, with emissions peaking around the year 2020 and then dropping rapidly to a level in 2050 that is at least 50 per cent below that in 1990.

Unless some new urgency is imparted to efforts to reduce greenhouse gas emissions, it is unlikely that temperature rises will be kept to 2°C or less. And the 2°C target itself is not an absolute, in the sense that we cannot say that a rise of 1.9°C is safe whereas a rise of 2.1°C is disastrous. For example, the sea level rise associated with a smaller temperature rise may be very dangerous for a low-lying region. It is simply that the likelihood of significant impacts on the human and natural worlds increases as global temperature rises. These changes could be smooth, such as a gradually increasing temperature, or sudden like one of the sharp transitions mentioned above.

A further consideration is that, even if global emissions targets aim to keep temperature rises to 2°C, the actual temperature rise may be much greater than this. In the UK, the Committee on Climate Change set the criteria that UK emissions targets should have a 50:50 likelihood of not

significantly exceeding 2°C and that there should be only a negligible chance of reaching 4°C. A scenario resulting from emissions peaking in 2016 and reducing at four per cent per annum thereafter still gives a ten per cent chance of a temperature rise of 3.6°C by 2200.

In comparison with this, the voluntary Copenhagen Pledges, even with their most strict interpretation, imply total global greenhouse gas emissions in 2020 well above the peak of the 2°C scenarios. The decision in Durban not even to activate emissions reductions before 2020 does not augur well for the required rapid reduction in emissions after 2020.

The considerable planning and technological development required will mean an inevitable delay in implementation and that global emissions will continue to rise for some time.

“The decision in Durban not even to activate emissions reductions before 2020 does not augur well for the required rapid reduction in emissions after 2020.”

Climate change impacts

If greenhouse gas emissions continue to follow a ‘business as usual’ curve then the 2007 IPCC report suggests that global temperatures will lie in the range 2.3–6.1°C, with a central value of about 4°C by 2100. The regional and local impacts of this will depend upon the level to which these systems can minimise the consequences of climate change

through adaption. The ability of systems to do this is inherently difficult to predict because, although societies have continually adapted to changes in climate, global warming is happening much faster than large changes that have occurred in the past.

It is the poorest and most vulnerable countries who are likely to suffer disproportionately from climate change. This is partly due to the limited resources available to adapt but also due to socioeconomic factors such as poverty, rapidly increasing populations, low levels of healthcare, limited infrastructure and lack of technology. Over exploitation of natural resources such as forests and land degradation can further exacerbate the impacts of climate change. But developed countries cannot be complacent. They too can sometimes show a surprising lack of resilience to extreme weather events. For example, in 2005 hurricane Katrina in New Orleans resulted in a large number of deaths and significant damage to properties when the flood defences failed.

The likely impacts of climate change have been summarised in the UK Committee on Climate Change's Fourth Carbon Budget report³ and in the UNFCCC's report *Climate change: impacts, vulnerabilities and adaption in developing countries*,⁴ and includes:

Water: by 2020 up to 250 million people in Africa could be exposed to greater risk of water stress. People reliant on freshwater from glaciers, such as in the Himalayas and the Andes, face increased risk of floods as glaciers retreat, followed by less reliable water supply, drought and water scarcity.

Ecosystems: many ecosystems are currently facing a range of pressures due to human activities.

Present predictions estimate 20–30 per cent of plant and animal species would become extinct as a direct result of 2–3°C of global warming. However, robust predictions are difficult to make given current understanding.

Food: the impacts of climate change on agriculture will be significant, but the effects will differ by region and by crop. Lower latitudes are expected to experience longer periods of drought interspersed with more intense storms. These effects are expected to be worse in poorer areas where a higher fraction of GDP depends on agriculture. The earth's population is expected to reach nine billion in 2050. Along with likely changes in diet, food needs will increase by 70 per cent, while climate change may reduce global average yields.

Coasts: by the end of this century, sea level is expected to rise more than the 20 centimetres observed over the past century. Current best estimates are probably closer to one metre, but will depend on the extent of ice sheet melt. Sea level rise will impact some of the largest coastal cities in the world; such as those on the US eastern seaboard or the mega-deltas of Bangladesh and eastern China. Many small islands, such as Mauritius, are very exposed to sea level rise and some may face complete inundation. Sea level rise will also lead to a heightened risk of flooding during storms and contamination of freshwater supplies with salt.

Health: despite some benefits, such as fewer deaths from cold exposure, climate change is likely to have a net negative impact on human health. Increases in deaths, diseases and injuries from heatwaves, floods, fires and droughts are predicted, as well as problems associated with poorer urban air quality.

“Clearly a sudden, rapid change in the climate system is likely to have large societal impact. But even with a smooth change in the climate system, a threshold could be passed beyond which society will struggle to adapt.”

Clearly a sudden, rapid change in the climate system is likely to have large societal impact. But even with a smooth change in the climate system, a threshold could be passed beyond which society will struggle to adapt. For example, a winter storm-track movement that no longer provides rainfall over Australia, or a pre-monsoon temperature over India that is so high that outdoor daytime activity becomes impossible, will present almost insurmountable social challenges.

Rio+20

Despite uncertainties it is clear that we are performing an extremely dangerous experiment with our one planet. Removing some CO₂ from the air may prove to be possible by capturing and sequestering the CO₂ from biomass power plants or by direct air capture. Even if this proves possible, it is likely to be an effective solution only some decades hence. It may also prove possible to offset some warming by solar radiation management; ie reducing the solar energy absorbed in the climate system. One technique involves continually putting sulphate or other particles high in the atmosphere. However, this is very unlikely to be able to cancel

the impact of greenhouse gases on all aspects of climate, it would have to be continued for centuries once started, and it is likely to have other environmental consequences.

Limiting the globally average temperature change to near 2°C may still be possible. But, it will be extremely challenging and will require co-operation and organisation on global, national and regional scales. Credible, international targets are required and these targets need to be supported by delivery plans at individual country levels. Action is needed now, and so the Rio+20 conference, the second Earth Summit, is perfectly timed to bring renewed urgency to the issue of climate change. It will view it in the context of the range of pressures we are putting on our planet. It will also view it in the context of its overarching aims: to reduce poverty, advance social equity and ensure environmental protection on an ever more crowded planet. Reflecting this, the two predominant themes for the Rio+20 conference are a green economy and the institutional framework for sustainable development. Tackling climate change effectively lies at the heart of both these themes.

“Action is needed now, and so the Rio+20 conference, the second Earth Summit, is perfectly timed to bring renewed urgency to the issue of climate change.”

The first summit in 1992 initiated an international process for limiting human induced climate change.

Our hope has to be that the urgency of tackling climate change will shine through the second Earth Summit as a central issue in the range of important problems that will be discussed, and that this will lead to a re-energising of the international process and its reflection in all the countries of the world.

5

A time for action

Paul Polman
Unilever

Business being a key player in the UN conference on sustainable development is the most significant difference between Rio+20 and Rio in 1992. Businesses have made significant strides in their own sustainability, and now they too look to national and international government processes to agree approaches on the issues that have become central to their ambitions. Unilever is a prominent example of this and **Paul Polman** sets out what his company is expecting from Rio+20.

These are turbulent times for the world and for the business community. Addressing this requires governments and business to work together to create the right framework for sustainable development at Rio+20.

The world's population has passed the seven billion mark, and will reach nine billion by 2050. Pressure on the world's resources is intensifying. Within two decades the collective human demand for water will exceed foreseen supply by about 40 per cent, while global food production will need to increase by 70 per cent to feed a growing population.

Increased competition for resources is compounded by the effects of climate change: desertification, floods and drought reduce agricultural yields and threaten livelihoods. Since 2000 there has been a 147 per cent increase in real commodity prices, hitting the most vulnerable hardest, so almost one billion go hungry each day.

Poverty and food scarcity are set against a rapid increase in the desire for resources, as new members of the middle class in emerging markets demand the goods enjoyed by those in the developed world. However, WWF states that if we all lived in the way people do in the US we'd need five planets to support us.

We need to find a new model of growth, one that is equally conscious of the needs of people and of the planet, and puts sustainability and equality at the heart of consumption. Sustainable growth must benefit the world's hungriest billion people as well as the rising middle classes. The time for talk is over. Businesses, governments and civil society must now act to ensure sustainability is embedded

in business strategies and is at the centre of public policy making. The Rio+20 summit is a key milestone that presents an important opportunity to galvanise public and private sector support, elicit commitment to a future of sustainable consumption and ensure the transition to a green economy begins in earnest.

Unilever's Sustainable Living Plan

Unilever's food, household and personal care brands, such as Knorr, Dove, Lipton, Becel, Rexona and Cif, are used two billion times a day in over half the households on the planet.

“The time for talk is over. Businesses, governments and civil society must now act to ensure sustainability is embedded in business strategies and is at the centre of public policy making.”

At Unilever, we believe that sustainable, equitable growth is the only acceptable model of growth. We have set ourselves a challenging vision: to develop a new business model which decouples our business growth from our environmental impact. We will aim to double the size of our business while cutting our environmental impact in half and increasing the social benefits delivered by our products. We have set out how we intend to do this in our Sustainable Living Plan, which we announced in 2010.

Spanning our entire portfolio of products and all the countries in which we operate, the plan sets out detailed actions to grow our brands, reduce costs, support our customers and open up new markets in a sustainable way. It is orientated around three central goals, to be achieved by 2020:

- to halve the environmental footprint (across water, waste and energy) of our products;
- to help more than a billion people to improve their hygiene habits and bring safe drinking water to 500 million people; and
- to source 100 per cent of our agricultural raw materials sustainably and enhance the livelihoods of 500,000 smallholder farmers in our supply chain.

These broad goals are supported by more than fifty quantitative, time-bound public targets against which we will report regularly and expect to be judged.

In our first year we have made good progress in many areas of the plan. At the end of 2011, 64 per cent of the palm oil we purchased came from certified sustainable sources, all the electricity purchased for Unilever sites in Europe came from renewable sources and we helped to change the hygiene behaviour of over 48 million people through our public health promotion.

The Unilever Sustainable Living Plan is not just a programme to manage the company more sustainably, it is also a catalyst for new ways of doing business; it is demonstrating the transition businesses must make to fuel the green economy.

Business and government acting together at Rio+20

No business can act in isolation. Organisations such as the World Business Council for Sustainable Development, the Consumer Goods Forum and the World Economic Forum are bringing companies together to share best practice and drive concerted, cross sectoral change.

At Rio+20, Unilever and other companies introducing similar sustainability models, from Accenture to Walmart, must make the business case for sustainability absolutely clear. More, we must demonstrate action by committing to ambitious plans across industries and sectors to introduce and deliver sustainable models of growth.

Action from business is best initiated and, more importantly, scaled up if supported by a framework of public policies that encourages and rewards action. At Rio+20 governments should consider a range of policy measures such as those shown in the table on the right.

“Action from business is best initiated and, more importantly, scaled up if supported by a framework of public policies that encourages and rewards action.”

Food & nutritional security	Climate change & green economy	Sustainable production & consumption	Public health & sanitation
<p>Developing multi-stakeholder partnerships to:</p> <ul style="list-style-type: none"> a) increase public-private investment in sustainable food value chains, by 50 per cent by 2015; b) enable smallholder farmers, including women, to benefit from participating in agricultural supply chains; c) promote sustainable sourcing practices and value chains. <p>Developing country governments should develop long term national programmes on nutritional security, and work with the private sector to address micronutrient deficiencies, particularly in the first 1,000 days of a child's life.</p>	<p>Ensuring a legal, multilateral climate change treaty is agreed by 2015 to keep global temperature rise to two degrees.</p> <p>Providing a domestic policy framework that supports the transition to a green (low carbon) economy.</p> <p>Incentivising innovation in low carbon technology by putting a price on carbon.</p> <p>Policy frameworks to increase recycling, ensure organised collection of municipal waste and to increase investment in waste management.</p>	<p>Developing new incentives for forest conservation.</p> <p>Incentivising demand for sustainably sourced products through preferential import/export tariffs and improved regulation.</p> <p>Working with business to incentivise consumers to switch to sustainably sourced goods and services.</p>	<p>Increasing collaboration with the private sector in improving access to safe water and basic sanitation, and in policies to address key hygiene behaviour changes such as handwashing with soap.</p> <p>Increasing investment in water, sanitation and hygiene sectors.</p>

New development goals

A concrete step forward at Rio+20 would be the beginning of a negotiation to agree Sustainable Development Goals (SDGs). Specific goals for human development and environmental performance will turn capacity building, innovations, investments, production and consumption in the right direction.

SDGs should build directly from the UN's Millennium Development Goals (MDGs), a series of eight development goals with specific targets to

reduce global poverty. The focus they have given the world has played a major role in halving the number of people living in poverty from 1990 levels. They have ensured more children, especially girls, are in school, fewer children die before their fifth birthday, and more people have access to basic sanitation and clean water. MDGs may not be met in each country, and progress has been patchy, but they have provided a roadmap to greater prosperity and equality.

Unilever believes that, in a similar way, Sustainable Development Goals could provide the overarching global framework the world needs to ensure governments and businesses continue to reduce poverty and improve livelihoods, while also protecting the earth's resources for generations to come.

Rio+20 should kick start this process by agreeing:

- the range of issues to be covered by SDGs: these should include targets for reducing poverty and food insecurity, reducing our carbon and water use, conserving biodiversity and protecting forests, while increasing our use of renewable energy and recycling;
- to ensure SDGs are adopted by all UN member states, contain measurable targets, and have a 2015-30 timeline; and
- a framework for collaborating with business; the process around SDGs must involve business in developing and helping to deliver the goals.

“Sustainable Development Goals could provide the overarching global framework the world needs to ensure governments and businesses continue to reduce poverty and improve livelihoods, while also protecting the earth's resources for generations to come.”

Sustainable development is complex. But Unilever is already demonstrating the business case for addressing sustainability. Rio+20 should build on business efforts and raise the ambition of governments to deliver a roadmap to a green economy. We will all be winners.

For more details of Unilever's Sustainable Living Plan visit: www.sustainable-living.unilever.com

This article will also appear in UNCTAD's forthcoming publication *The road to Rio+20: for a development led green economy*, which will be launched at the Rio+20 summit.

6

Planetary and social boundaries: a compass for the voyage ahead?

Barbara Stocking
Oxfam

Rio+20 is an intersection of sustainability and development ambitions and challenges. How can the needs of the world's ever growing population be met in a sustainable way? As negotiators try to find the right balance, **Barbara Stocking** reflects on how the needs of both agendas can be met by approaching the challenges via a new frame for decision making. One which explicitly recognises the safe space for humanity between social thresholds that no one should have to fall below and the resource constraints that we cannot exceed.

Rio+20 has to be seized as an opportunity to start setting the world on course for sustainable development, towards a future in which everyone can lead a life of dignity and opportunity, within the means of this one planet. It would be hard to overstate the scale of that challenge, but it would certainly help if we could set out on that voyage with a clear vision of where we want to head for. So here's one idea, presented in a recent Oxfam discussion paper by Kate Raworth, *A safe and just space for humanity: can we live within the doughnut?*, which could help to provide a global-scale compass for the journey ahead.⁵

In 2009, Johan Rockström of the Stockholm Resilience Centre brought together a group of leading earth system scientists to come up with the concept of planetary boundaries. They identified a set of nine earth system processes, such as the freshwater cycle, climate regulation, and the nitrogen cycle, which are critical for keeping the planet in the stable state known as the Holocene that has been so beneficial to humanity over the past 10,000 years.

Under too much pressure from human activity, any one of these processes could be pushed into abrupt and even irreversible change. To avoid that risk, the scientists proposed a set of boundaries below their danger zones, such as setting a boundary of 350 parts per million of CO₂ in the atmosphere to prevent dangerous climate change. Together the nine boundaries form a circle, and Rockström and co have called the area within it "a safe operating space for humanity."

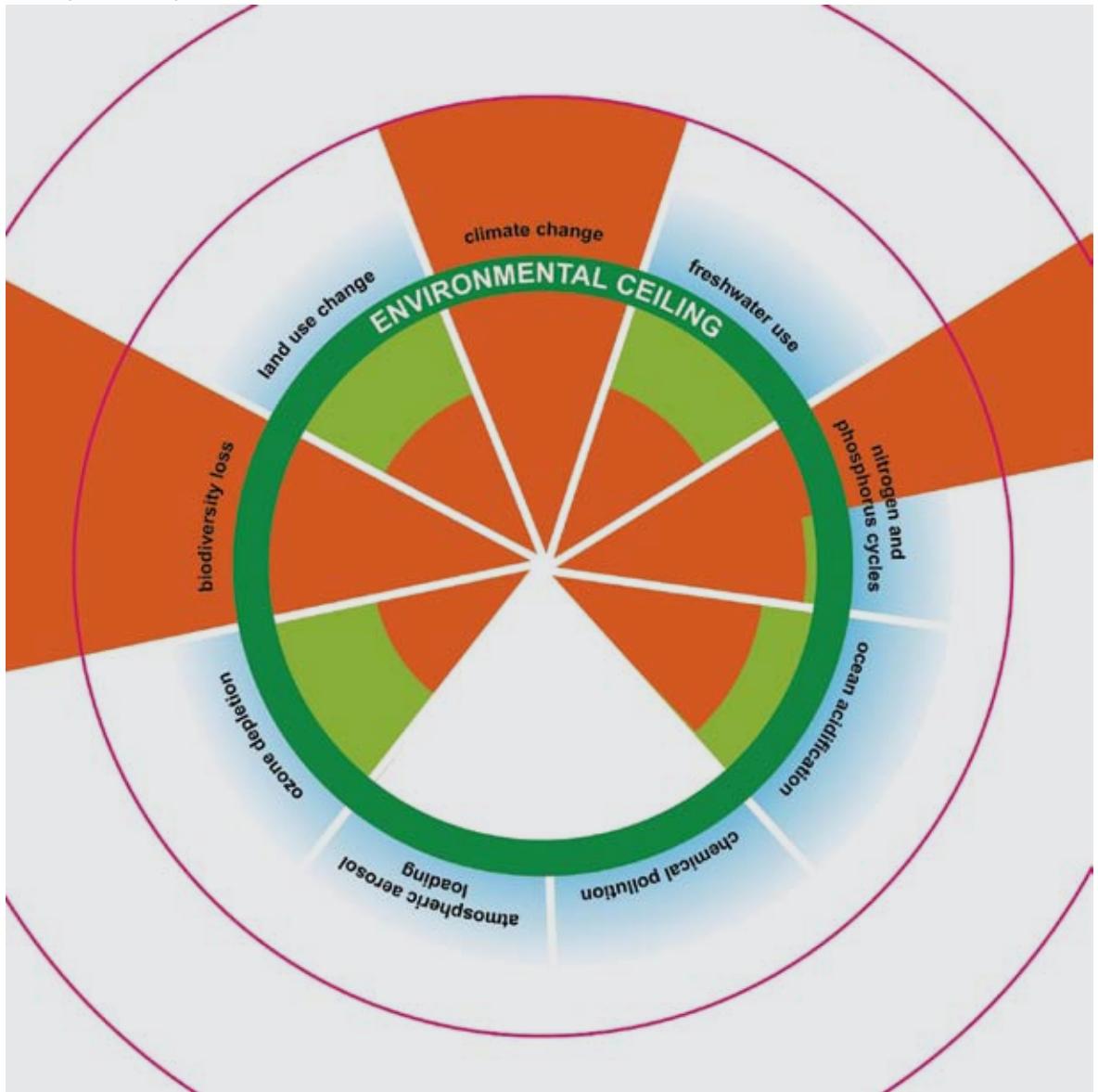
Nine planetary boundaries

It's a fantastically powerful idea. While economics has traditionally treated environmental degradation as an externality because it falls outside of the monetised economy, natural scientists have turned that approach on its head and stepped in with a clear, quantified depiction of boundaries within which the global economy should operate. These boundaries are described not in monetary metrics but in natural metrics fundamental to the planet's resilience.

Yet a critical part of the picture is clearly still missing. This safe operating space may protect the environment, but it could also leave many millions of people exposed to extreme poverty and deep social inequality. We can only pursue global environmental sustainability if we simultaneously pursue far greater global equity. That means adding the concept of social boundaries to the picture. Just as there is an environmental ceiling of resource use, above which lies unacceptable environmental degradation, so too is there a social foundation of resource use, below which lie unacceptable human deprivations.

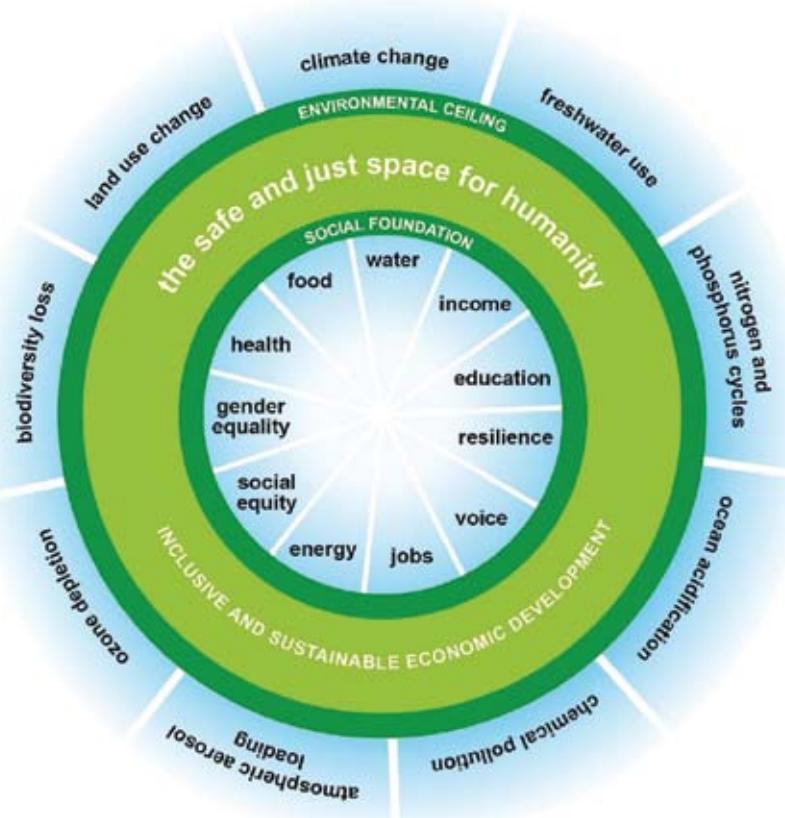
What kind of deprivations exactly? Human rights provide the cornerstone for defining that, but an early indication of the 21st century priorities to be tackled comes from the social issues raised by governments in the run-up to Rio+20. In their official submissions to the conference, the world's governments highlighted 11 critical social deprivations, covering lack of healthcare, food, water, income, education, resilience to shocks, voice, jobs, energy, gender equality, and social equity. Together these constitute the social foundation shown overleaf.

Nine planetary boundaries



Source: Oxfam

A safe and just space for humanity



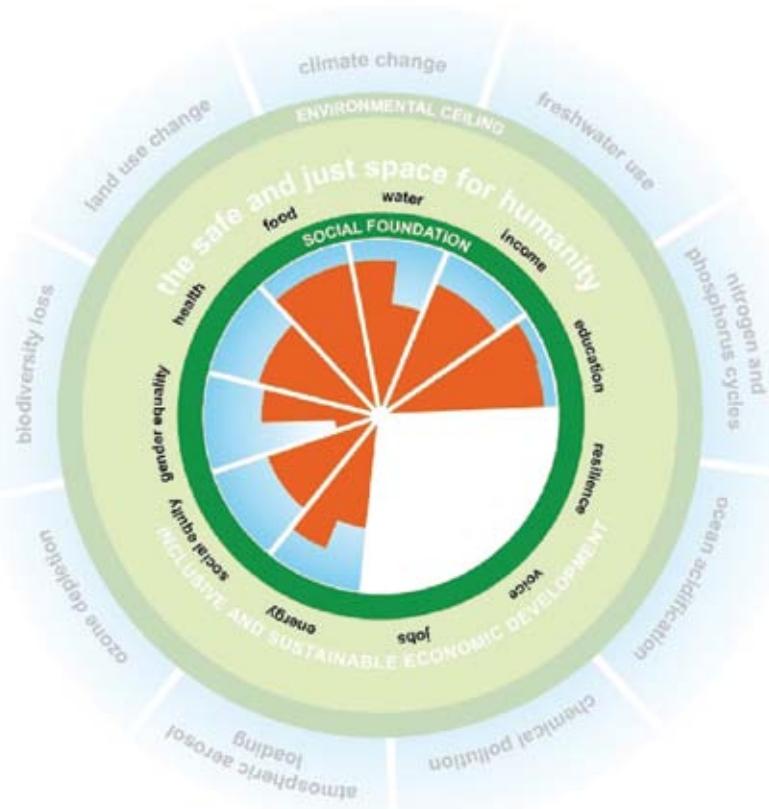
Source: Oxfam

Between the social foundation and the environmental ceiling lies a space, shaped like a doughnut, which is both the safe and just space for humanity.

The earth system scientists estimate that humanity has already crossed at least three of the nine planetary boundaries, for climate change, nitrogen use, and biodiversity loss. Likewise, UN statistics

show that humanity is falling far below the social foundation on all eight dimensions for which data are available, see illustration right. Around 13 per cent of people are undernourished, indicated by the blue gap below the social boundary for food, 19 per cent have no access to electricity and 21 per cent live on less than \$1.25 per day.

Falling far below the social foundation



Source: Oxfam

Putting planetary and social boundaries together in this way tells an extraordinary story. Many millions of people still live appallingly far below the social foundation while, collectively, humanity has already exceeded several critical planetary boundaries. It's a powerful sign of just how deeply unequal and unsustainable the path of global development has been.

But the really striking implication here is that ending poverty for everyone alive today need not be a source of stress on planetary boundaries. Providing the additional calories needed by the 13 per cent of the world's population facing hunger (850 million people) would require around one per cent of the current global food supply.⁶ Bringing electricity to the 19 per cent of the world's population (1.3

billion people) who currently lack it could be achieved with less than a one per cent increase in global CO₂ emissions.⁷ And ending income poverty for the 21 per cent of people who live on less than \$1.25 a day (1.4 billion people) would require just 0.2 per cent of global income.⁸

What is the biggest source of planetary boundary stress today? The excessive consumption levels of roughly the wealthiest ten per cent of people in the world, and the resource intensive production patterns of companies producing the goods and services that they buy. A mere 11 per cent of the global population generates around 50 per cent of global carbon emissions. The richest ten per cent of people in the world hold 57 per cent of global income. And one third of the world's sustainable nitrogen budget is used to produce meat for people in the EU, just seven per cent of the world's population.

"A mere 11 per cent of the global population generates around 50 per cent of global carbon emissions."

Adding to the excessive resource use of the well-off are the aspirations of a growing number of consumers seeking to emulate today's high income lifestyles. Over the next 20 years, global population is expected to grow by 1.3 billion people, while the global middle class is expected to grow from under two billion consumers today to nearly five billion by 2030.

For people moving into the lower income end of this group, rising consumption may mean being able to

afford meat, electricity and transport for the first time, transforming their lives and life long prospects. But for those at the higher income end, it may mean aspiring to lifestyles that are deeply unsustainable.

The pressure on resources will be far reaching. Global demand for water is expected to rise by 30 per cent, and demand for food and energy both by 50 per cent. As international competition for these resources grows, those living in poverty will be worst hit, particularly through high and volatile food prices, and land and water grabs. Securing their rights to the resources they depend upon is a top priority.

It is clear that, if humanity is to live between social and planetary boundaries, there will have to be far greater equity in resource use, both within and between countries. But there will also have to be far greater efficiency in how resources are transformed to meet human needs. Around 30 per cent of the world's food supply is currently lost in harvesting, along the supply chain, or is thrown away by consumers. Indeed, industrialised countries throw away almost as much food as is produced in sub-Saharan Africa every year. Redistributing resource use, and raising resource efficiency are clearly both essential to the transition.

This 'doughnut' is a compellingly simple image of sustainable development, but what difference could it make to how we approach the challenge? It doesn't give us the answers to how we achieve sustainable development, but perhaps that is where its power lies: by starting from a different perspective it can prompt us to ask new questions, and see challenges from unfamiliar angles.

One of the most important implications that it brings out is the evident need to get beyond GDP, towards a far richer conception of what constitutes economic development. GDP's dominance is clearly past its sell-by date. The global crises of environmental degradation and extreme human deprivation urgently demand a more nuanced starting point for economic theory and policy making.

“GDP’s dominance is clearly past its sell-by date. The global crises of environmental degradation and extreme human deprivation urgently demand a more nuanced starting point for economic theory and policy making.”

Just imagine if this doughnut-shaped diagram of social and planetary boundaries found its way onto the opening page of every macroeconomics textbook. If someone wants to be an economist then, first, there are a few facts they should know about this planet, and the limits of human activity that it can take. They should also know about the human rights of its people, and the resources it will take to fulfil those. With these fundamental concepts of planetary and social boundaries in place, their task as an economist is crucial: to design policies, markets and regulations that bring humanity into the safe and just space between the boundaries, and enable us all to thrive there.

Under this framing of what a successful economy looks like, the questions that economists ask would change radically. And that's the power of frames because, through asking new questions, we can shift to new paradigms. What constitutes economic development? Clearly, it depends on far more than a quarter-on-quarter increase in GDP. Inclusive and sustainable economic development that brings humanity into the safe and just space requires four main shifts in focus:

From what is sold, to what is provided free too. Many of the goods and services that are essential to society are provided free: by nature, by parents and by volunteers. Indicators that better reflect the value of the unpaid care economy and unpriced ecosystem functions are needed to broaden concepts of what constitutes ‘economic value’.

From a focus on the flow of goods and services to monitoring underlying stocks too. The flow of goods and services is only half the economic story, as any company knows. Also critical is what is happening to the asset base. Nations’ physical and financial assets have been measured for some time. But attention is now turning to better accounting of every nation’s fundamental wealth: its natural, human, and social assets. Investments in restoring and expanding these are at the heart of creating economic sustainability.

From a focus on aggregates and averages to monitoring distribution too. Most economic indicators are either aggregates, national gross domestic product for example, or averages, ie GDP per capita. But it is the actual distribution of incomes, wealth and outcomes across a society that determines how inclusive it is. Data disaggregated

across households, and by gender and ethnicity, are needed too.

From monetary metrics to natural and social metrics too. Not everything that matters can be monetised, and economic development cannot be assessed in monetary terms alone. Natural metrics, such as tonnes of carbon emitted per year, and social metrics, such as hours spent providing unpaid caring work, must be given more weight in policy assessments, and need to be compiled and reported in ways that empower citizens to hold their governments to account.

“When planetary boundaries are combined with social boundaries, it is hard to disagree that together they present a compelling vision for inclusive and sustainable economic development.”

These four shifts in economic emphasis would generate a much broader notion of economic development and, if put into practice, economic policy making would have a far greater chance of bringing humanity into the safe and just space.

Faced with planetary boundaries alone, some policy makers have been heard to say that they present a limit to economic development. But when planetary boundaries are combined with social boundaries, it is hard to disagree that together they present a compelling vision for inclusive and sustainable

economic development. Because it is between social and planetary boundaries where humanity has the greatest chance to thrive. If Rio+20 could pick up this compass and put it to use, it could well help us to head firmly in the right direction.

7

An equitable green economy: a southern perspective on a global challenge

Tara Rao
FairGreenSolutions

Many developed countries see great value in a green economy narrative as a new focus for discussions of sustainability and as a key theme for Rio+20. But do southern countries agree? Does this new narrative fit with their aspirations? **Tara Rao** from FairGreenSolutions argues that this approach can only have value if it has equity at its heart.

When the tortoise raced the hare, the slow but steady approach won the race. The same cannot be said of sustainability. It can offer steady, consistent progress, based on collective commitments that are hard won via complex international negotiations. But there are no signs of winning the race against a breakneck economic model that values growth above all, no matter what the costs to the planet we live on and the countries and societies that populate it. Is Rio+20 an opportunity to set that right?

As a means to achieve sustainable development, the green economy has been identified as one of Rio+20's two overarching themes. The logic is that this opens up the possibility to link ambitions of equity and sustainable development to reform of the current mainstream economy.

But does this logic hold? There are significant concerns that a narrow focus on a green economy will result in the loss of one of the main qualities of the Rio process. Namely, the integrated approach to sustainable development and its focus on the three strands of economic, social and environmental development. Others fear that focus on a green economy is the next step in a global march to further commercialise and commoditise natural resources and human relations to the detriment of those who are already most vulnerable.⁹ These are valid concerns.

As set out in the principles of the 1992 Rio declaration, the process is underpinned by the goals of: establishing a new and equitable global partnership through the creation of new levels of co-operation among states, key sectors of society and people; working towards international agreements which respect the interests of all and protect the integrity of the global environmental and

developmental system; and recognising the integral and interdependent nature of the earth, our home.¹⁰

“We face a continued need to secure equitable development, and to address an urgent set of interrelated crises. The way forward has to be a collective one, which means that it also has to be an equitable one.”

How do these sit with the new, more recent, green economy focus? There is a need to revisit, reinterpret and reaffirm these principles with reference to today's very different reality. We face a continued need to secure equitable development, and to address an urgent set of interrelated crises. The way forward has to be a collective one, which means that it also has to be an equitable one. Principle three of the Rio declaration laid that foundation when stating that: “The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.”¹¹

Redrawing the sustainability map

Too often, sustainable development is used as little more than a phrase to describe environmental issues. Meanwhile, development proper focuses on economic growth, with scant regard for the devastating impacts of natural resource exploitation and the burning issues of disparity and deprivation that lie in its wake. For developed countries in the north, a focus on sustainable development largely involves thinking about environmental problems,

but without a robust commitment to reduce their own overall footprint. The developing world, with its diverse spectrum of countries, has chosen to follow in the footsteps of the north.

“There is a vital need to identify what a green economy means. This will help to overcome legitimate concerns about how the approach could play out and ensure that it is an equitable and robust means for achieving sustainable development.”

As a result, both north and south have pursued the objectives of sustainable development with inadequate commitment, ambition and consistency and, therefore, have had a limited degree of success. But sustainable development cannot be separated from other types of development. In contrast, it should constitute the core of what the pursuit of development means. The ongoing failure to recognise this contributes to the magnitude of the environmental and social challenges that we continue to face.

The growing prevalence of the green economy narrative exacerbates the disconnect between the three strands of sustainable development, as it only focuses on two: environment and economy. If it continues to shape sustainable development thinking then it must explicitly integrate the

social strand and the notion of equity. A focus on equity will help to ensure that the foundations for achieving sustainable development are in place, providing for levelled entitlement, and the opportunity for all to access and contribute to the benefits of progress.

The commitment to building an equitable green economy holds the potential to redraw the sustainability map. Environmentally, this would involve a transition that keeps consumption levels within the earth's carrying capacity. And, in terms of equity, a collaborative and equitable transition requires commitment to a common humanity, expressed in global resolve and national plans for action. It provides the basis for a new understanding of multilateralism, collective action, and national development planning, creating not a monolith global economy, but multiple green economies.

Defining the green economy

There is a vital need to identify what a green economy means. This will help to overcome legitimate concerns about how the approach could play out and ensure that it is an equitable and robust means for achieving sustainable development. Building a clear, common understanding is key but, so far, a definition of the green economy has eluded the Rio+20 process.

A group of experts, of which I was one, came together with the support of the Danish 92 Group Forum on Sustainable Development to consider what a green economy must include. Our work led to this proposed definition:

- the green economy is not a state but a process of transformation and a constant dynamic progression;

- the green economy does away with the systemic distortions and dysfunctionalities of the current mainstream economy and results in human well-being and equitable access to opportunity for all peoples, while safeguarding environmental and economic integrity, in order to remain within the planet's finite carrying capacity; and
- the economy cannot be green without being equitable.¹²

Beyond a definition

Moving beyond an intangible, abstract understanding of an equitable green economy requires an understanding of what its reality will be on the ground. Presented here is a set of working principles that aim to create a concrete framework to guide how the concept can consistently inform action on the ground. The principles also provide a lens through which relevant policy and practice decisions can be considered. They highlight that a successful transformation is as much about the right processes as it is about the required outcomes.

The suggested principles are:

A foundation of clear goals: build the foundation for an equitable transformation by specifying clear goals that address systemic distortions and dysfunctionalities. This would include actions such as: eliminating harmful subsidies, creating green jobs, securing decent work and livelihoods, avoiding unsustainable infrastructure development that locks in high emissions, moving towards sustainable consumption and production, and addressing trade barriers.

Enablers: establish clear objectives for how action

can be mobilised. Examine the roles of different factors, such as technology, capacity and finance, and define the contribution that each can make towards building an equitable green economy. For example, consider the role of technology development and deployment for building green economies shaped by local needs, or the role of capacity building in supporting actors to actually build and manage the transformation.

Institutions: create the necessary framework of institutions at all levels with clearly defined, but aligned, roles and mandates. This will enable them to work together effectively to establish the robust governance and networks needed for an equitable transition, as well as the necessary innovation and finance flows.

Transparency and inclusion: ensure the equitable green economy is transparent and engages all affected stakeholders. Powerful actors will need clearly defined responsibilities and forms of accountability, while making sure other stakeholders are empowered to act as both beneficiaries of and contributors to the green economy. Transformation is not just the responsibility of governments. It requires the involvement of all actors, public and private, powerful and disempowered.

Timelines and measuring progress: decisions should include clear timelines for action to achieve objectives, introduce new systems for measuring progress, and track the well-being of people, places, and the planet. This principle underpins the idea of the development of an equitable green economy as a progression that will transform the mainstream economy and all sections of society.

Addressing the key challenges: food, water and energy

Food, water and energy are among the priority issues that progress towards an equitable green economy must focus on. They are central to advancing equity and sustainable development, as reflected by the fact that they are central both to discussions around the Millennium Development Goals (MDGs) and the Rio process. There are strong interrelationships between the issues. For example, there are increasing concerns about the intensifying competition between energy generation and food production when it comes to land and water use. It will be impossible to secure an equitable transformation if these tightly connected issues are looked at separately.

The recognition of the water, food and energy security nexus is helpful in this regard.¹³ Even so, it is useful to consider the central objectives in relation to each area, as they have implications for both domestic and international policy agendas in the north and the south. Key objectives, integrating the access and security dimensions as part of sustainability, are:

Food: eradicate food vulnerability and disparity to build resilience, increase opportunity, and improve health and well-being through sustainable food consumption;

Water: equitable access to freshwater for human uses within the limits of protection of freshwater resources; and

Energy: develop energy pathways that target energy deprivation and sustainable use to ensure access to clean and sustainable energy for all.

Applying the working principles

To apply these principles in reality is key to making the whole exercise worthwhile. When it comes to existing, defined ambitions, can the working principles be used as a framework for understanding the transformation required? In the context of the energy agenda, for example, how could the working principles be applied to the Sustainable Energy for All initiative led by UN Secretary-General Ban Ki-moon? Applying the principles would suggest three stages:

Stage 1: thoroughly understand the issue, in this case the problems and realities of energy access and security and its relationship with deprivation, disparity and unsustainability, in its national or local context.

Stage 2: set the ambition for the energy agenda, defining what will be achieved in a manner that integrates access and security considerations and will achieve equity and sustainability.

Stage 3: translate the agenda into action on the ground using the working principles as a filter to define and outline how a green economy can enable energy access and security as an integral part of the wider agenda of sustainable energy for all.

Laying the foundation at Rio

Rio needs to provide an appropriate and adequate foundation for achieving the goals of sustainable development, using the building of an equitable green economy as the means.

Laying such a foundation at Rio would require the meeting to generate shared resolve to integrate the

three strands: social, environmental and economic, into building an equitable green economy, and kick start a meaningful process post-Rio at the international level, which also facilitates ambitious action at the national level.

Further to this, conference delegates and the assembled political, business and civil society leaders will need to:

- resolve to put the world on a trajectory towards establishing a network of equitable green economies;
- reflect this through the multilateral process that emerges with a new sense of purpose and energy, and reaffirm commitment to the Rio principles as a basis for building an equitable green economy;
- move towards building a common understanding of an equitable green economy, with a shared vision and understanding of the process of transformation;
- make clear moves to identify ways of financing the transformation; and
- lay the foundations of a decision making and operational framework to kick start the process post-Rio+20. This should include a focus on aspects such as: moving towards sustainable consumption and production; acknowledging the role of green jobs and decent work in the new economy; a concerted effort to make shared progress on food, water and energy challenges; strengthening and aligning institutions, including UNEP, to create a network for achieving sustainability, global to local; and working towards adopting a new scale of measurement, beyond GDP, supported by ambitious timelines.

The tortoise and the hare ran two very different races. Having allowed the hare to chart our course, with a disregard for consequences and a poor record of success, it's time to see the route from the tortoise's perspective: consistent and steady. If not, we run the risk that the planet and its people will not be the winners in the end.

This article is based on the paper *Building an equitable green economy*, commissioned by the Danish 92 Group Forum on Sustainable Development, and written by experts from developing countries. Tara Rao is a lead author of the paper. It is available at www.92grp.dk

8

From Rio+20 to Rio+40: what needs to happen in the next 20 years

Matt Williams, Isobel Tarr & Sarah Arnold
UK Youth Climate Coalition

Young people had a strong voice at Rio in 1992, with a 12 year old girl bringing the conference to a standstill as she pleaded for world leaders to take action on the challenges that would affect her future. They will have a similarly important voice at Rio+20 and, as **Matt Williams, Isobel Tarr** and **Sarah Arnold** of the UKYCC demonstrate, they have organised themselves into an effective stakeholder movement with clear asks of decision makers as well as a strong sense of the continuing role that young people need to play in demanding change.

The UK Youth Climate Coalition (UKYCC) recognises that climate change threatens to compound all the other problems faced by people and the planet over the next few decades. So, while we call for justice and social change, any solutions to wider problems that fail to recognise this will stumble early on.

Climate change is our generation's issue. We will inherit the impacts of the climate change that world leaders have already, irrevocably, committed us to due to their failure to take ambitious action. But just because we identify with the issue and see a key role for ourselves as young people it does not absolve those currently in power of the responsibility to act. Business leaders and politicians hold the levers of change. Our job, as part of an international youth movement, is to use Rio+20 and other such platforms as opportunities to reach leaders, to make them hear our voices and respond to our visions for change.

“We will inherit the impacts of the climate change that world leaders have already, irrevocably, committed us to due to their failure to take ambitious action.”

Twenty years ago, 12 year old Severn Suzuki gave a powerful speech to the UN Earth Summit in Rio. She called for world leaders to wake up and take action to save the planet and improve the lives of millions of people across the world. Some progress has been made, but much of her vision remains unfulfilled.

When we look back in 20 years time, what will we want to have changed? We know for certain that we want the next 20 years to take us closer to a world which is clean, safe, fair and just for all. We want our current leaders to have recognised the impacts their decisions will have beyond their time in office and their lifetimes, and for them to stand up to scrutiny. We'll be personally judging politicians on the plan they lay out at Rio+20. Not just as voters who may or may not vote for them in the next election, but as fellow residents of a finite planet. We need politics we can be proud of.

To help achieve this, young people must be recognised and included as key stakeholders at all levels in conversations, dialogues and decisions about the environment, poverty reduction and climate change. So what is it we want to see?

At the international level

Progress on a green economic transition: Rio+20 should be used as a platform to push for a global transition to a green economy as a way to address poverty, unemployment and climate change. A green transition must be seen as part of wider strategies to protect natural resources, adapt to the worst effects of climate change and pursue clean industrialisation to alleviate poverty.

Prioritise ambitious climate change mitigation: we refuse to accept the loss of cultures or nations to climate change. International efforts to keep temperature rises within 2°C are not enough, we must aim for 1.5°C as a maximum. Science shows that above this, low-lying island nations are put at unacceptable risk of being wiped out. While we still have the tiniest window to prevent this from happening, we must do all we can. In the next 20

years, efforts to adapt to and mitigate climate change must prioritise the most vulnerable.

Consolidate the youth voice: UKYCC works closely with young people in countries across the global north and south and we know that many face a bleaker future than we do in the UK. Young people must build on the connections formed over the past decade, continue to exploit social media and the internet to understand each other, share stories and build alliances over thousands of miles. And we must have a shared voice at the UN climate talks, making it clear that current efforts to tackle climate change are nowhere near enough. This loosely formed international youth movement is vital to unlocking the political will and change needed.

In the UK

A domestic focus on the green economy: as a developed country, the UK has a responsibility to reduce its emissions and to show leadership on building a green economy. This transition will provide meaningful, decent and accessible green jobs that will help to tackle youth unemployment, as well as provide UK plc with a world leading clean energy sector.

Getting the change we need

Political structures which offer decision makers relatively short term incentives, such as winning elections, create a cycle which severely limits their ability to exercise the foresight which lies at the heart of justice for future generations. They alone are not equipped to deal with the challenge of climate change. Our role as a grassroots movement is to outline a shared vision, demonstrate to decision makers that they have a popular mandate to take decisive action, and to start realising the

future we want to see ourselves, regardless of legal or political frameworks.

“We’ll be personally judging politicians on the plan they lay out at Rio+20. Not just as voters who may or may not vote for them in the next election, but as fellow residents of a finite planet. We need politics we can be proud of.”

We act wherever we can; away from, around the edges, or within the cracks of political structures. This is not just because we need to represent the interests of everyone, to ensure that the transition to a low carbon future is a fair one, but because history shows us that grassroots mobilisation, in its many forms, is effective.

The grassroots movement against climate change is unique in that it is urgent but also intergenerational. As activists, we cannot reassure ourselves that a gradualist approach is sufficient. In other social struggles there has never been an anticipated ‘point of no return’, after which the goals of the movement are flung into a new reality. But alongside the urgency of keeping temperature rises under 1.5°C is the knowledge that the pathway to sustainable development will be traversed by successive generations, each elaborating the story of the future with their own voices and addressing concerns which are relevant to the world in which they live. Where the fight to stop climate change is an

immediate struggle for the current generation, played out on behalf of future generations, securing sustainable development will be an ongoing effort.

In recognition of this, organisations such as the Intergenerational Foundation make an argument for an ombudsman for future generations, to safeguard the legal rights of those not yet born, both at EU and at state level. Different interpretations of this have been installed in Hungary, New Zealand and Finland, all with the aim of countering the short term political cycle with long term thinking. Although the focus is on embedding the approach in high level politics, it was prompted by grassroots mobilisation, particularly in the case of Hungary.

Why Rio matters

Although grassroots movements are where we believe change can, must and will happen, political structures do have a role to play. A discursive relationship, between politics and the grassroots, is often found where change occurs, and equally we see change occurring outside of political structures, yet often highlighted or galvanised by political events. It is within this context that we can consider the potential of Rio+20 to create change.

There is much scepticism over whether multilateral processes are successful or even useful, in light of the lack of political will exhibited by some countries and the lack of trust by others. Furthermore, even when processes are agreed to, they are not always carried out. For example the Millennium Development Goals have seen very uneven progress since their agreement. World hunger has even risen since their adoption, and development assistance has fallen significantly short of targets.

However, all is not doom and gloom. There has been some progress. The international agreements made at the Rio summit in 1992 have created grassroots action and political change. Much of the public awareness of climate change from 2007 onwards was directly due to the Intergovernmental Panel on Climate Change's reports and most countries' emissions reductions targets are a result of international trade agreements. Although this has all taken place more slowly than science dictates it should, there is cause for cautious optimism. We cannot abandon processes that are, to some extent, working, albeit slowly and painfully, when we have no other global solution.

“The economic crisis is a symptom of the culture of constant demand in which we live, not a separate, more urgent problem. Therefore, a multilateral summit on sustainable development is precisely what we need right now.”

This is not just naïve youthful optimism, but there are concrete reasons to believe that Rio+20 can help us towards a sustainable and just future.

In light of the current economic crisis, many have let the environment take a back seat, or have labelled climate change too difficult to deal with. But we live in a finite world. The rising tide of human demand is putting unprecedented pressures on our planet

that are simply not sustainable. The economic crisis is a symptom of the culture of constant demand in which we live, not a separate, more urgent problem. Therefore, a multilateral summit on sustainable development is precisely what we need right now. We can use Rio+20 to bring the debate into the mainstream. Furthermore, the development of social media has proved a massive leveller of opportunity. Wherever you are in the world, you can follow what is going on in the negotiations and discuss the issue with others.

“Rio+20 must mark a moment when the world chooses a different path. We want it to live up to our best hopes and do the best for the young people who come after us.”

Rio+20 will be a focal point for civil society. One hundred and thirty political leaders are expected to attend Rio, but that number will be eclipsed by the 50,000 members of civil society also planning to attend. Rio+20 will be a hub for NGOs, scientists and concerned citizens who understand the necessity of sustainable development. Already, the UN has invited stakeholders to provide submissions, which have been compiled into a zero draft. Global action requires a massive collective commitment for individual change and Rio can help provide the needed impetus.

Finally, even on a political level, there may be hope for some movement. The glitz and excitement of formal agreements can obscure the importance of

progressive ‘coalitions of the willing’ that global summits can inspire and strengthen. Already we have seen that, while some countries continue to drag their feet, others at a government, business and civil society level are starting to work together and forge on ahead.

Ultimately, Rio+20 must mark a moment when the world chooses a different path. We want it to live up to our best hopes and do the best for the young people who come after us. Rio+20 must be the moment when we agree a plan for the future that, at its heart, guarantees the best future for young people and future generations.

Endnotes

- 1 The Royal Society, 2010, *Climate change: a summary of the science*
- 2 Intergovernmental Panel on Climate Change (IPCC), 2007, *Fourth assessment report*
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- 6 Calculated for each country by multiplying the average food deficit of the undernourished population by the total undernourished population, then dividing the global total by the global food supply (per capita global food supply x global population). Source for food deficit and undernourished population: www.fao.org/economic/ess/ess-fs/fs-data/ess-fadata/en and source for per capita global food supply and global population: <http://faostat.fao.org>
- 7 OECD/IEA, 2011, *Energy for all: financing access for the poor*
- 8 L Chandy and G Gertz, 2011, *Poverty in numbers: the changing state of global poverty from 2005 to 2015*, The Brookings Institution. The amount required, based on 2005 data, is estimated to be \$96 billion. It is the net additional income required to be transferred to people living in poverty and excludes overhead and distribution costs.
- 9 Such concerns are reflected in the submissions to Rio+20 from, among others, Bolivia and Venezuela. These points are also raised by many southern NGOs. See for instance the text by the Working Group on the Green Economy at the Porto Allegre Social Forum in January 2012: www.internationalviewpoint.org/spip.php?article2494. Or see this critique from a number of Brazilian and other developing country NGOs: www.inesc.org.br/news/2012/fevereiro-1/the-future-they-want-a-critique-of-the-rio-20-zero-draft
- 10 United Nations General Assembly, 1992, Report of the United Nations conference on the environment and development. Annex I, *Rio declaration on environment and development*
- 11 Ibid
- 12 Danish 92 Group Forum on Sustainable Development, 2012, *Building an equitable green economy*
- 13 See: www.water-energy-food.org



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Rio+20: where it should lead

The Rio+20 Earth Summit, coming during a prolonged global economic downturn, is a rare opportunity to reconnect with our hopes for the world. It is a chance to think beyond the acute phase of the financial crisis about how we want to embed sustainable development and stability into the decision making of governments, businesses, and civil society.

As delegates head to this historic event, RSPB and Green Alliance have asked leaders from politics, business, NGOs, economics, science and the youth movement, including Deputy Prime Minister Nick Clegg who is representing the UK, to give their views.

Although progress has been made since 1992, sustainable development has not gained the traction those at the original summit would have hoped. The authors give their opinions about why this is, the lessons we have learned and where we go next. Taken together they make a powerful case for sustainable development being at the centre of any new settlement that emerges from the current economic crisis.