Ending poverty in a carbon constrained world: rapid transition and new development directions

> Speech by Andrew Simms, policy director and head of the climate change programme at nef (the new economics foundation), to the UN ECOSOC special session on climate change and the MDGS, New York, 2 May 2008.

Once, I could stop-dead even the happiest conversation by mentioning that I wrote for a publication called the *World Disasters Report*. Several years ago the International Red Cross sent me on its behalf to assess the early impacts of climate change on vulnerable populations.

What I saw in Tuvalu, in the South Pacific, and learned from other small island states, about being resilient in the face of an unpredictable and extreme climate, may hold lessons now for how many millions more can withstand the upheaval of global warming on our small island planet.

Tuvalu is living a uniquely modern paradox. It won the lottery of the internet age being awarded the domain name '.tv.' Allegedly it has a bigger delegation in Los Angeles to sell rights, than it has here in New York to protect its political interests. But, lying just a few metres above sea level, Tuvalu is in acute danger of losing its real home, just as it benefits from its virtual one.

We can learn a lot from the mere fact that island communities like this survived for so long on remote shards of land, exposed to the full force and vagaries of nature To do so, first they had to respect their environmental limits, which are more obvious on small islands.

Next they evolved resilient local economies that helped them cope with extreme and unpredictable weather. These were, of necessity, based on reciprocity, sharing and co-operation, and not unlimited growth fed by individualistic, beggar-thy-neighbour competition.

Today, as collectively we face and exceed the limits of the earth's bio-capacity, we are challenged at the global level to learn in a few short years, lessons that such small communities often took millennia to arrive at. Our task is enormously complicated by the intricate interdependence of the modern global economy, the unbalanced distribution of power and benefits within it, and a pace of international decision making that, until the ice started to melt so rapidly, I would have described as glacially slow.

Fortunately there is much that we already do know to guide our actions, drawing on decades of experience in dozens of countries and through thousands of community based organisations around the world.

For example, a coalition of leading international development and environment organisations based in the UK, that we helped to form, spelt out in a series of reports looking in detail at different global regions, how climate change, if unchecked, stands not only to block further progress on the Millennium Development Goals, but to reverse gains hard won over many years.

Although dramatic-sounding, our conclusion was, without exaggeration, that to pull the perilously close trigger of irreversible global warming, would mean not just greater hardship for millions, but the end of development as we have understood it for the last half a century.

I note that NASA's James Hansen said only recently that, far from needing to stabilise greenhouse gas concentrations at some future, higher level, we may already have gone too far, and need to cut back, with unimagined consequences for re-engineering the global economy.

Severe drought in Australia has already partly triggered world-wide food shortages and high and rising prices, creating shocks that ripple from the High Street in Britain to the markets of Dhaka and Port au Prince.

The UK's official Hadley Centre for Climate Prediction and Research, recently concluded based on a moderate scenario for change, that the percentage of the Earth's land surface suffering *extreme* drought had already trebled to three per cent, in less than a decade, and will rise until fully half the Earth's land surface is prone to some kind of drought by 2090. Droughts will also be longer in duration.[i]

It is not enough simply that we set targets and make plans to change. The juggernaut of carbon emissions must be stopped before it takes us over the cliff of irreversible global warming, driven by what scientists oddly call 'positive environmental feedbacks.'

More worrying still, the edge of the cliff is not clearly visible. The feedbacks are volatile, hard to predict and may be terrifyingly sudden, so we must act on precaution and the best estimates available.

On this, we ultimately have no choice, as the economy is a wholly owned subsidiary of the biosphere. An individual may recover from financial bankruptcy, but if we allow our ecological debts to bankrupt a climate conducive to human civilisation, geological history shows that it could take tens of thousands of years to be restored if, indeed, it ever is.

We already know that people living in poverty are hit first and worst by global warming. This and the challenge of reducing poverty in a carbon constrained

world calls for a new development model which is *climate proof* and *climate friendly.*

From now on, all decisions will need to be scrutinised for whether they will increase or decrease vulnerability to climate change. We must look through the lenses of building resilience at the community level, and reducing risk. And, it is the communities at risk who must shape our plans.

Parallel to the approach of the IPCC, the recent report of the *International Assessment of Agricultural Knowledge, Science and Technology* showed that a massive shift of support to small scale farmers using a diverse range of agro-ecological methods would be one of the most efficient ways to build resilience, inoculate against food crises, and insure against increasingly hostile weather patterns.

Community-based coping strategies such as the use of seed banks, water management, vulnerability mapping, storm and flood protection that works with the local environment, and the conservation of forests and other ecosystems – all represent effective ways for threatened communities to adapt.

If replicated and scaled-up, small-scale renewable energy projects promoted by governments and community groups can help both to tackle poverty and reduce climate change. But this needs political commitment, significant new funds from governments and a major shift in priorities by the World Bank and other development bodies.

There is no either/or approach possible; the world must meet both its commitments to achieve the MDGs and tackle climate change. The two are inextricably linked.

Here we crash headlong into another, equally large problem.

Unlimited global economic growth is defended as necessary to tackle poverty. And, conventional economic growth will happen in poor countries as a consequence of effective poverty reduction. But at a global level, the policies designed to pursue growth have become a mask for making the rich, richer, whilst leaving the poor with few benefits and abandoned to deal with the environmental consequences.[ii]

During the 1980s, the so-called lost decade of development - from every $100 worth of global economic growth, around $2.20 found its way to people living below the absolute poverty line. A decade later that had shrunk to just $0.60c, and the actual mean income of those living under $1 per day in Africa also fell.[iii]

There has been, in effect, a sort of ‘flood-up’ of wealth from poor to rich, rather than a ‘trickle-down.’ It means, perversely, that for the poor to get slightly less poor, the rich have to get very much richer, implying patterns of consumption which, in a world facing climate change, cannot be sustained. It now takes around $166 worth of global growth - made up of all those energy-hungry giant flat screen TVs and sports utility vehicles - to generate a single dollar of poverty reduction for people in absolute poverty, compared with just $45 dollars in the 1980s.[iv]

Earnings of between $3 and $4 per day is the rough level at which the strong link between income and life expectancy breaks down. So, let us ask what would happen if we agreed $3 per day as the minimum level of income to escape absolute poverty?

Using the ecological footprint measure, if the whole world wished to consume at the level of the United States – a consumption pattern which has been fuelled, incidentally, by the credit binge which led to the current economic crisis - we would need, conservatively, over 5 planets like earth to support them. But, under the current pattern of unequally distributed benefits from growth, to lift everyone in the world onto a modest $3 per day, would require the resources of around 15 planets like ours. Where, you might ask, will the other 14 come from?

If we are serious about tackling poverty in a carbon constrained world, then, we need a new development model, better measures of progress, and a shift from relying on unequal global growth towards serious redistribution. If we think of the planet as a cake, we can slice it differently, but we cannot bake a new one.

Climate change is not the only reason that we have to learn to live with far fewer fossil fuels. We must also contend with the high and rising price of oil, and the imminent global peak and long decline of oil production.

What, if any, guides do we have to surviving these multiple shocks?

One country, very much and long maligned, provides a glimpse of what the near future may hold for others.

Cuba has already lived through the economic and environmental shocks that climate change and peak oil hold in store for the rest of the world.

Its sudden loss of access to cheap oil imports and its economic isolation were so extreme in 1990 at the end of the cold war, and its reaction to the shock was so contrary to orthodox approaches, and successful, that it was dubbed in Washington DC the ‘anti-model.’ It is as near as we have to a laboratory example in the real world.

Cuba grew heavily dependent on cheap Soviet oil for its transport, industrial export-oriented farming and wider economy. Also, it sits in the flight path of the annual hurricane season, regularly contending with extreme weather events.

Then oil imports dropped by over half. The use of chemical pesticides and fertilisers dropped by 80 percent. The availability of basic food staples like wheat and other grains fell by half and, overall, the average Cuban's calorie intake fell by over one third in around five years.

But, serious and long-term investment in science, engineering, health and education meant the country had a strong social fabric and the capacity to act. Successive reforms dating back longer reduced inequality and redistributed land.

Before their local 'oil shock,' Cuba had investigated forms of ecological farming far less dependent on fossil fuels, and had in place a system of 'regional research institutes, training centres and extension services' to support farmers.[v]

At the heart of the transition after 1990 was the success of small farms, and urban farms and gardens. State farms later followed their example. Immediate crisis was averted by food programmes that targeted the most vulnerable people, the old, young, pregnant women and young mothers, and a rationing programme that guaranteed a minimum amount of food to everyone.

Soon, half the food consumed in the capital, Havana, was grown in the city's own gardens and, overall, urban gardens provide 60 percent of the vegetables eaten in Cuba.[vi] The threat of serious food shortages was overcome within five years.

Interestingly, Cuba's experience both echoes what America achieved in a more distant time of hardship during World War II, when Elinor Roosevelt led the 'victory gardening movement' to produce between 30-40 percent of vegetables for domestic consumption.

Cuba's demonstrated that it is possible to feed a population under extreme economic stress with very little fossil fuel inputs. Other consequences were also surprisingly.

As calorie intake fell by more than one third, and fuel was unavailable, the proportion of physically active adults more than doubled and obesity halved. Between 1997–2002, deaths attributed to diabetes fell by half, coronary heart disease by 35 percent, strokes and all other causes by around one fifth.[vii]

The approach was dubbed the 'anti-model' because it was highly managed, focused on meeting domestic needs rather than export oriented, largely organic

and built on the success of small farms.[viii] The same countries approach to disaster preparedness and management is also instructive.

Compared to the deaths and destruction in New Orleans following Hurricane Katrina, when Hurricane Michelle hit Cuba in 2001 only 5 lives were lost, in spite of 20,000 homes being damaged, and recovery was quick. It was due to proper planning, and a collective approach managed by government, but owned at the local level.

As disasters expert Dr Ben Wisner commented on the evacuation of 700,000 of Cuba's 11 million population, 'This is quite a feat given Cuba's dilapidated fleet of vehicles, fuel shortage and poor road system.'

At least one analyst suggests that the Cuban experiment, 'may hold many of the keys to the future survival of civilisation.'

Currently, according to our calculations, in a calendar year the world as a whole goes into ecological debt around October 7th – by which time we have consumed more and produced more waste than ecosystems can deal with. The results are seen in climate change, oceans emptied of fish, and desertification.

Forty years ago Robert Kennedy said that economic growth measured everything apart from that which really matters. But it is possible to assess if we are achieving human development whilst living within our environmental means.

nef's own so-called 'Happy Planet Index', compares the relative success of nations at delivering long life expectancy and high levels of well being, compared to the size of ecological footprint. The results reveal many middle income countries performing well with good life expectancy and satisfaction, and relatively low footprints. Strikingly, however, some of the best performers are small island states. Somehow they have worked together to produce more convivial communities, whilst respecting environmental limits.

The UN faces huge challenges.

Not least is how to recognise and protect the large and growing number of people we can expect to be displaced in a warming world. The climate refugee crisis will dwarf that of political refugees. What will happen to the nationhood and economic areas of countries that could disappear entirely, like Tuvalu?

How can we change our locked-in thinking about economic development, and reorganise around the principles of resilience, social justice, sufficiency, ecological efficiency, and the capacity to adapt?

We might begin by asking, as acid tests:

– will what we do make people more or less vulnerable?
– will it move us toward truly sustainable one-planet-living?
– will it moving us fast enough to prevent irreversible, catastrophic climate change?

When the people of Tuvalu first encountered Europeans in the 19th century, they gave them the name *palangi*. Victorian travellers translated the word to mean “heaven bursters,” a reference to their ship’s guns. Now our lifestyles truly threaten to burst the heavens.

At the very least, to achieve poverty reduction in world threatened by climate change, we know that rich countries must radically cut their own consumption to free-up the environmental space in which others can pursue, as a first step, the Millennium Development Goals.

The good news is that we now know from the literature on human well being, that making the rich, richer does nothing to increase their life satisfaction. On the contrary, numerous studies confirm that once your basic needs are met, you are just as likely to have high life satisfaction, whether your ecological footprint is large or small.

Impassable ecological obstacles lie on the path down which we chase the shadows of over-consumption to deliver our well-being, and expect the poor to be grateful for crumbs falling from the rich man’s plate. The good news is that another way is not only possible, as the philosopher A.C. Grayling writes, it is better, richer and more enduring.

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Relevant publications:
(most freely available at www.neweconomics.org)

- *Up In Smoke? Threats from, and responses to, the impact of global warming on human development*
- *Africa - Up In Smoke?*
- *Up In Smoke? Latin America and the Caribbean*
- *Africa II - Up In Smoke?*
- *Up In Smoke? Asia and the Pacific*

- *Growth Isn't Working: the Unbalanced Distribution of Costs and Benefits from Global Economic Growth*
- *The (un)Happy Planet Index: An index of human well-being and environmental impact*
- *The UK Interdependence Report: How the world sustains the nation's lifestyles and the price it pays*
- *Chinadependence: The second UK Interdependence Report*
- *Environmental Refugees – The Case for Recognition*
- *Ecological Debt: the Health of the Planet and the Wealth of Nations (book, 2005)*
- *Do Good Lives Have to Cost the Earth (book, 2008)*

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[i] Burke, Brown and Christidis, (2006) *Modelling the recent evolution of global drought and projections for the twenty-first century with the Hadley Centre climate model*, Hadley Centre for Climate Prediction and Research.
[ii] David Woodward and Andrew Simms (2006) *Growth isn't working: the uneven distribution of benefits and costs from economic growth*, nef, London.
[iii] Shaohua Chen and Martin Ravallion (2004) *How have the world's poorest fared since the early 1980s?* Development Research Group, World Bank, Washington DC.
[iv] David Woodward and Andrew Simms (2006) *Growth isn't working: the uneven distribution of benefits and costs from economic growth*, nef, London.
[v] Dale Allen Pfeiffer (2006) *Eating Fossil Fuels – Oil, Food and the Coming Crisis in Agriculture*, New Society Publishers.
[vi] Novo GM and Murphy C (2001) 'Urban agriculture in the city of Havana: A popular response to a crisis' *Growing cities growing food: urban agriculture on the policy agenda: A reader on urban agriculture* Resource Centres on Urban Agriculture and Food Security. See, http://www.ruaf.org/node/82 [11 March 2008].

[vii] Franco, M et al (2007) *Impact of Energy Intake, Physical Activity, and Population-wide Weight Loss on Cardiovascular Disease and Diabetes Mortality in Cuba*, 1980–2005, American Journal of Epidemiology 2007 166(12):1374-1380.

[viii] Dale Allen Pfeiffer (2006) *Eating Fossil Fuels – Oil, Food and the Coming Crisis in Agriculture*, New Society Publishers.