

Resource Scarcity, Climate Change and Multilateralism program http://www.cic.nyu.edu

Food Security: Are We Nearly There Yet? Presentation at RRI / Oxfam conference, The Hague, 7 September 2011

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1.

So here we are, in the midst of our second global food price spike in three years.

Back in 2008, as we all remember, the big question was whether the spike we saw then was just a blip, or part of a new normal.

The OECD and FAO, you'll recall, thought it *was* just a blip, and that prices would shortly resume their long term decline, even if they'd remain higher on average than before the spike.

I, like many others, was sceptical – primarily because of the underlying structural drivers.

We knew then and we know now, for example, that population is projected to rise from 6.7 billion now to around 9 billion by 2050, with most of the rise taking place in low income countries.

At the same time, we also know that the 'global middle class' is getting larger and richer: changing its diet, and consuming more of everything else too – especially energy, hence rising demand for crops as biofuel feedstock.

Yet even as demand is spiralling, we're also increasingly aware that limits to supply growth seem to be emerging. So:

While projections suggest that the world will need to produce 50% more food by 2030 (and 100% more by 2050), there are already signs that the productivity gains of the 'Green Revolution' are running out of steam.
 Global food consumption outstripped production for seven of the eight years from 2000 to 2008.

- On energy, the International Energy Agency projects that demand will rise by 45% by 2030, requiring \$36 trillion in investment in energy infrastructure between 2007 and 2030. Yet that the amount currently being invested is far below this level, which back in 2008 was prompting the IEA to warn of the risk that oil prices would soar once again as soon as global demand recovered – which indeed has proved to be the case, with emerging economy demand especially resilient. That, of course, affects food by increasing the cost of fertiliser, transportation and on-farm energy use – and by making biofuels more attractive too.
- On water, demand is set to rise by around 25% by 2025, but we know that even existing consumption is already beyond sustainable levels in many water systems, especially in West Asia and North Africa. 2.8 billion people already live in areas of high water stress, and by 2030 the figure is projected to be 3.9 billion, a rise of 38%.
- And on land, we see intensifying competition for land between food crops, feed for livestock, biofuels, fibre products, forest conservation, forests for use in carbon sequestration, urbanisation and other land uses even as we also see the amount of arable land available globally almost halving since 1960, from 0.39 hectares per person then, to 0.21 hectares in 2008.

And of course we were all acutely aware in 2008, as we are now, that all this is before we factored in the extent to which **climate change**, the biggest scarcity issue of all, would act as a threat multiplier on all four fronts.

It is already reducing crop yields in low latitudes – where most developing countries are – and will do so in *all* latitudes once global average warming exceeds 2° Celsius, an outcome we're firmly on track for following the weak outcome of Copenhagen in 2009.

It will change precipitation patterns and reduce water availability, particularly in the dry tropics. It will increase land degradation. It will make the ecosystem services provided by forests even more important. And it will demand absolutely unprecedented shifts in both energy *and* food production systems – as they confront the need to reduce their massive greenhouse gas emissions.

So that was the world we saw in 2008, and it's still the world we see now.

And for all that the last three years have been shaped by an extraordinary economic crisis, it's striking how *little* this has affected the supply and demand fundamentals on food, oil and other basic resources.

Even as the OECD has succumbed to sovereign debt crises, anaemic growth, unemployment pushing 10% and so on, food prices have broken new records; Brent crude oil has kept stubbornly above \$100 a barrel; export bans have remained a concern; food stock to use ratios have remained tight; extreme weather has continued to shape the food outlook.

2008, in hindsight, does not look like a blip.

2.

So that, very briefly, is where I think we are. How's the policy response going?

Well, it seems to me that, having forgotten about food and agriculture policy for two decades prior to the 2008 food spike, policymakers have been getting to grips with the agenda in stages.

To begin with, it was striking how many of them – in both OECD and developing countries – saw the nature of the challenge in terms of **production**. Even as late as early 2009, at the G20 London summit, I heard numerous policymakers zoning out on the figure of producing 50% more food by 2030 – as though meeting that production target was all there was to it on achieving global food security.

But then, in a second stage, they started to realise that **access** to food mattered as much as production – helped, I think, by the first report of the UN High-level Food Task Force in particular. So then we started to hear a lot more about social protection, safety nets and so on.

The third stage then saw them start to realise that they had to make the **trade** system more resilient as countries' security of supply concerns multiplied. We can see a lot of that in this year's French G20 agenda, with its emphasis on areas like export bans, food stock transparency, financial markets and so on.

And then there's the fourth stage – which I think policymakers are only just starting to wake up to now.

And this is all about making agriculture **sustainable** as well as more productive.

I've been consistently surprised by how many policymakers think the challenge today is basically to replicate the Green Revolution in the countries that missed out on it first time – overlooking the fact that all too often, Green Revolution approaches proved unsustainable, in water use, in the intensity of fertiliser inputs, and in reliance on fossil fuel energy.

This time round, we need to double yields and halve resource intensity.

And policymakers are only just beginning to map out what that will involve in practice – helped by some excellent analytical work now getting underway on this front, by organisations from Oxfam and IFPRI to McKinsey and the Prince of Wales' International Sustainability Unit.

Policymakers are only just beginning to work out that food security has to be seen in the larger context of a resource-constrained world – a vision that's at the very heart of Oxfam's new Grow campaign.

And they're only just beginning to realise the importance of seeing resource scarcity issues – food, land, water, energy, climate – not as separate single issues, but as an interconnected cluster.

In our work at NYU, we argue that there are basically five reasons why it's so important to see scarcity issues as a set. It's because:

- First, the same basic drivers that I just mentioned are at play in each case: exponentially rising demand, plus hard questions about whether supply growth can keep pace.
- Second, they're linked together by complex feedback loops. We've touched on why high oil prices tend to lead to high food prices too. But high oil prices also mean more competition for land, because biofuels become more attractive. They mean higher water prices, because of the energy intensity of water pumps, desalination plants and purification system. And there are many, many more linkages like this which policymakers often struggle to recognise.

- The third reason to see scarcity issues as a set is because unless policymakers look at the whole picture, there's tremendous risk of just displacing problems from one aspect of scarcity to another. Biofuels – an energy security measure that undermined food security – are a case in point. Or look at how the agricultural Green Revolution often increased food security at the expense of water security. And so on.
- Fourth, because on each aspect of scarcity, poor people and poor countries are most vulnerable – so there are crucial issues here about poverty, state fragility and conflict prevention.
- And fifth, because scarcity changes people's behaviour. Perceptions of scarcity create extraordinarily fertile ground for kneejerk reactions and panic. Think about how perceptions of a scarcity of deposits can cause a run on a bank. Now think about why so many countries imposed food export bans in 2008. When people believe that there isn't enough to go round, there's an immediate risk of zero sum games raising the question of how to instil sufficient confidence and trust to get actors to cooperate in positive sum games instead.

3.

So these four stages – production, access, trade and sustainability – are how I think policymakers have been getting to grips with *understanding* the challenge on food and agriculture. But how have they been doing on *delivery*?

I have to say that I find the picture at global level very discouraging. We've heard a lot of rhetoric from donor governments, and from the G8 and G20, on the subject of agriculture and food. But in practical terms:

- G8 countries have been falling a long way short on the relatively modest funding increases agreed at L'Aquila in 2008. And we haven't seen a massive surge in the proportion of development aid going to agriculture, after that share was cut from nearly 20% in 1980 to less than 5% in 2006.
- There hasn't been a dramatic scaling up of public funding for agricultural research and development, even though we know this is needed.

- The problem of landgrabs is developing apace with one estimate suggesting that 80 million hectares of land has been acquired in developing countries over the last decade, over half of it in Africa.
- Neither the US nor the EU have shown themselves willing to opt for a serious rethink on first generation biofuels, even though there's ample data about the effect that they've had on food prices.
- OECD countries have so far shown themselves unable or unwilling to act seriously on food waste though up to a *third* of food is thrown away.
- And even though we know that healthier diets with less meat, dairy and processed foods – would be good for the environment, good for people's health, and good for social justice, the trend is going the other way in every single OECD country, and increasingly in emerging economies too.

And if governments have been falling short individually, then the same is true of their attempts to act collectively as well:

- The Doha round remains stalled, even though reform of developed country farm support policies is now more important than ever.
- The Copenhagen climate summit was a major disappointment, with the International Energy Agency estimating that the policies agreed there put the world on course for a 21% *increase* in emissions between 2008 and 2035.
- There's a lot of talk about REDD, but little actual disbursement for projects
 and big doubts about how much demand for REDD credits is really out there.
- Despite crystal clear recommendations from ten key international agencies, this year's G20 agriculture ministers' meeting was unable to agree action on export bans – or even on a system of emergency food reserves proposed by the World Food Programme.
- And multilateral system coherence is as bad as ever even though crosscutting issues – like the relevance of land to agriculture, *and* climate, *and* energy, *and* urbanisation – demand that we take an integrated approach.

These few examples are, alas, part of a bigger shortfall in multilateralism at the moment.

This year's World Economic Forum at Davos was hallmarked by the idea that, far from moving from a G8 to a G20 world, we're actually moving towards a 'G Zero' world, with *no* major countries willing to show serious leadership on global issues.

And if Doha and Copenhagen have both become "multilateral zombies" – staggering on, moaning piteously, never quite dying – then unfortunately it looks as though that's true of sustainable development more broadly as well.

This year's Commission on Sustainable Development broke up without agreeing an outcome, even though nothing controversial was even on the table: the argument erupted over language to do with the Occupied Palestinian Territories. It's not exactly an encouraging indicator of what we can expect at Rio 2012 next year – a summit which already looks badly off track.

So that's the bad news, and there's quite a lot of it. We have a pretty serious fight ahead of us, over the next few years. But let me finish on a more upbeat note than that.

4.

Because we also ought to note that in fact, there are quite a lot of hopeful signs around at the moment. Here are a few of the main ones for me.

- We're starting to see some genuinely exciting examples of ecological restoration, for instance in the Sahel or the Loess Plateau in China – and recognising that part of what makes these success stories work is serious engagement with the land tenure issues involved.
- We're starting to see some of the more progressive multinational companies wanting to be part of the solution in a way that moves beyond the narrow voluntarism of the past, and towards genuinely systemic approaches.

- There's been a breathtaking scale-up of social protection in recent years, especially in emerging economies like Mexico, Brazil, India and China – often with strong food security aspects, as with the Zero Hunger program in Brazil.
- The issue of planetary boundaries is now firmly on the political radar, thanks to the pioneering work of the Stockholm Resilience Centre, and I don't think it's crazy to hope that Rio 2012 might start focusing on the institutions that we'll require in order to keep within them.
- And although I fear that the global economic crisis will get worse before it gets better, I also think it's forcing us to confront issues of unsustainability
 economic, social and financial as well as environmental.

Let me wrap up on this note. I'm actually extremely hopeful about the future. I think markets will adapt, and new technologies will become available, as they always do. I think we *will* create a genuine synthesis of economy, society and ecology, because we'll have no choice but to do so. I believe that the *long* term prospects for global food security, for sustainability, for our common future, are good.

It's the *short* term that worries me. I see the next two decades as a period of transition, which will be hallmarked by extraordinary volatility, uncertainty and turbulence. I think of it as "shooting the rapids". And to do it collectively, we have to remember two things.

First, that it's the poorest and most vulnerable among us who will bear most of the risks as we navigate the white water ahead. Issues of resilience and risk reduction were not prominent in the Millennium Development Goals, but they're going to have to be absolutely central to post-2015 development policy as we enter this period of scarcity and upheaval.

Second, we need to be clear that a successful transition will only happen if we face up to, and embrace, the massive issues of equity and fairness that inevitably arise in a world of limits.

All those multilateral zombies I referred to earlier are ultimately the result of our not being able to find ways to talk about issues of fairness. Why on earth else have we spent two decades speaking in platitudes about countries' "common but

differentiated responsibilities", all the while assiduously avoiding defining what that actually means?

What we still haven't faced up to is that there is no path to sustainability that doesn't involve equity. We're kidding ourselves if we think differently. And the longer we delay, the harder it will get. So whether we're talking about land rights, or sustainable diets, or access to water, or sharing out a global carbon budget, we have to face up to Gandhi's simple truth that there's enough for everyone's need, but not enough for everyone's greed.