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**Scarcity issues and conflict in Africa**  
**Presentation to Saferworld and All Party Groups on Africa and Conflict**  
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This week, for the first time since it was set up in the 1970s, issues of resource security – and scarcity – are dominating the G8. Climate change, the Japanese government's top G8 priority, is making itself felt faster and stronger than scientists thought even just a few years ago. Food prices have risen 83 per cent in three years; oil is just below \$145 – its highest level ever.

In this talk, I want to argue that Manmohan Singh was right to say, as he did at the G8 yesterday, that “climate, energy and food are fundamentally interlinked and need an integrated approach”. I also want to focus in particular on what they mean for Africa and fragile states – before wrapping up with some brief thoughts on what it all means for development, conflict prevention and the multilateral system.

First, though a quick survey of the issues. Start with **climate change**. You already know the familiar litany of damages we can expect from climate change – temperature increase, rising sea levels, droughts, floods, glacial melting, extreme weather events and so on. From the specific point of view of humanitarian risks, IPCC scientists say that the most important impacts will stem from reduced water availability, with hundreds of millions of people exposed to increased water stress. Second, crop yields will decrease in tropical latitudes – and in *all* latitudes above two degrees. Third, there are high risks in densely populated megadeltas – especially in Asia, but also many in Africa including the Volta, the Niger, the Senegal and above all the Nile.

Debate continues about how much conflict risk climate change really presents. Ban Ki-moon got into hot water last year when he penned an op-ed article saying that fighting in Darfur was caused by climate change – an argument gleefully seized on by the Sudanese government. It's also hard to be specific about the effects that climate change will have. We know it's likely to lead to more migration, for instance – but we don't know how many people, or from where to where. Nonetheless, most analysts do agree that climate change represents a significant threat multiplier – especially given its potential to drive water scarcity and land degradation.

Next, **energy** – which for our purposes is really about oil prices. The International Energy Agency says demand will rise by 50% by 2030. Supply, meanwhile, has remained stubbornly around 85 million barrels a day for the last few years. As you know, many commentators argue that we're at or close to the definitive peak in world oil production. To some, that view remains contentious – but ultimately, you don't *have* to believe in an early peak to be worried about the supply outlook. The IEA says that \$22,000 billion dollars needs to be invested in new supply infrastructure by 2030 (that's a little under half of 2006's gross world product) – so far, there's no sign of this investment being forthcoming.

In Africa, fragile states fall into two categories as far as high oil prices are concerned. For producers, there's the familiar set of issues around the 'resource curse', which you all know about. On top of that, there's also the newer dynamic that with global markets as tight as they are, insurgent groups can really leverage the effects of actions targeted at oil infrastructure. The best example of this is MEND in Nigeria, which has been picking up tips on attacking networks for maximum impact from insurgents in Iraq. Last month, for the first time, militants moved offshore to attack a Shell deep

water production facility – causing Nigeria's output to fall to its lowest in 20 years, and immediate rises in the world oil price.

For oil importing countries, the effects are different – but still dramatic. Last December, when oil prices were still under a hundred dollars, the IEA did a study of 13 sub-Saharan African countries, including South Africa, Ghana, Tanzania and Senegal – and found that the increased cost of oil bought by these countries since 2004 was 3 per cent of their combined GDP: more than the sum of debt relief and aid they received over the past three years. Many of these countries are now walking a tightrope: on one hand, allowing price rises to pass on to consumers risks unrest, as numerous riots this year have shown. But on the other, subsidizing oil costs risks exhausting treasuries and stoking inflation – as West Africa, in particular, now shows.

And then there are **food prices**. The main reason food prices have been rising is the same as for oil prices: it's simply the fact that more people are getting more affluent. With food, the issue is that middle classes in emerging economies are shifting to western diets with more meat and dairy products, which are much more grain-intensive. Globally, we've consumed more food than we've grown for each of the last five years, leading to stock levels at an all time low. That's helped to raise prices too – as have biofuels, extreme weather, energy prices and more recently the export restrictions or suspensions imposed by many countries.

With food, as with oil, rising prices are stoking unrest: the current World Bank tally is that 37 countries around the world have experienced riots that are at least partly due to food prices. The big question here is whether what we're seeing is a blip, or the 'new normality'. Some people take comfort from a recent OECD-FAO report that looked ahead to 2017, and argued that while food prices would stay on average higher than before, they'd soon resume their long term decline. Unfortunately, though, that report's assumptions are open to question. No quantitative account is taken of climate change in this forecast, and oil prices are assumed to rise from \$90 today to \$105 in 2017 – more than 50% lower than even just the *current* price.

As well as energy, climate change and water availability, there's also the factor of land. Many commodities analysts say that to meet a 50 per cent increase in demand, we'll need to expand not just productivity of existing land, but also the acreage that's covered. But that is easier said than done. FAO estimates that there's only 12 per cent more usable arable land (although estimates on this vary widely). But however much more land there is, there's also increasing demand for it from other uses: as well as food, feed and fuel, there's fibre (paper and timber); carbon sequestration; forest conservation; and of course urbanisation. All this is before we take into account erosion and desertification – FAO reckons 16 per cent of the land we use now is already degraded. Once again, it's in Africa that we may see some of the most intense effects of competition over land – as the violence in Kenya at the start of the year underlines.

I think the really crucial to take away is this: these issues are **all interconnected** (as the table I've handed out illustrates). It's pretty obvious that climate change will be bad news for food security, for instance: the IPCC reckons that it will lead to between 40 and 170 million more undernourished people. But it's more surprising to realize that the link can work the other way around too – that global food production is responsible for one fifth of the world's greenhouse gas emissions.

Or look at links between energy and food. It's become clear to us all that biofuels can cause problems for food security: this year, a full third of the US corn crop will go into fuel tanks rather than stomachs. But it's more surprising to realize how much the world's food system depends on energy, too: for intensive agriculture depends on energy to plough the land, harvest crops, and then process, refrigerate, freight and distribute them, as well as to make some crucial kinds of fertilizer. So as energy gets more expensive, food does too.

But if these issues are heavily integrated, the same is unfortunately not true of governments and the multilateral system – which are instead generally fractured into silos. I won't talk here about what we do about that, but I have just published a paper on this which you can download on

GlobalDashboard.org [see <http://www.globaldashboard.org/climate-change/new-paper-multilateralism-and-scarcity/>].

On then to some very brief closing thoughts about what we need to do.

- First: improve our **conflict early warning systems** to take account of scarcity issues. There's no one system that draws together climate impacts, food and energy prices, land degradation and water scarcity and political risk. This will never be a precise business – it inherently involves qualitative judgement calls as well as quantitative data – but we *must* get agencies sharing data and getting better at anticipating problems.
- Second: donors need to build scarcity management into **development programming** – especially governance work. You probably know the critique that many European donors focus too much on rather technical governance like public financial management, and not enough on hard-edged political issues like political parties, patronage systems, elections and so on. But it's in this political sphere that scarcity issues are making themselves felt – so donors need to be able to provide much more politically aware advice to partner governments on how to manage the acute shocks and chronic stresses that are coming up.
- Third: proactive investment in **resilience and risk reduction**. The tsunami led to welcome emphasis on disaster risk reduction (DRR), but as we know, much more needs to be done to build bottom-up resilience to slow onset disasters and longer term stresses. International Alert published a report last year emphasising that effective peacebuilding and effective climate adaptation work can end up looking like much the same thing. So we need to 'connect the dots' between DRR, conflict prevention, peace-building, climate adaptation, and other 'stability agendas', and above all.
- Fourth: a particular focus for all of us has to be **social protection systems**. I mentioned earlier that many governments are going slowly towards the wall through subsidising energy and food, and pushing inflation up in the process. It would make much more sense to target assistance at the poorest people through social protection systems – whether cash, vouchers, food or whatever. But these systems are often administratively demanding and potentially at risk from corruption, so donors have a lot to do to help partner countries build them up – quickly.
- Fifth, we need to invest in **scaling up the humanitarian system** - especially the number of vulnerable people that the international system is able to assist at any one time. A rough rule of thumb sometimes used at the UN is that the world's humanitarian system can assist up to around 100 million people at any one time (at present, for example, 73 million people depend on the World Food Programme for assistance). However, as the impacts of scarcity trends increase, the humanitarian system will need to be ready for the possibility of greatly increased numbers of vulnerable people. The same may well apply to the UN's peacekeeping system as well.
- Finally, remember the crucial importance of **narrative** in all this. As we head into this period of turbulence, there are real risks for humanitarianism if the overall political narrative becomes dominated by fear - of increasing instability, of scarcity, of conflict with different regions, ethnicities or nationalities. Fear is fertile ground for kneejerk policy responses, and for publics focusing on 'people like us' rather than a wider humanitarianism. As humanitarians, we clearly have a big stake in promulgating a different storyline, stressing *transition to a new stable state* rather than just *the new instability*. The question here, then: how can we set out a storyline to explain and encompass global transition, that brings people together rather than fracturing them apart?

Cause... ...effect	Climate	Energy	Land use	Water	Food
<b>Climate</b>		<p>Fossil fuel emissions drive climate change</p> <p>Some air pollution dampens climate change by reducing radiative forcing</p> <p>Energy security concerns may lead to more coal</p>	Deforestation leads to methane emissions as trees decompose	<p>Water a highly energy intensive industry (energy = 40% of water cost in developing countries)</p> <p>Groundwater depletion leads to higher energy use for extracting / desalinizing water</p>	<p>CO2 emissions from agriculture energy use (cultivation, processing, refrigeration, distribution)</p> <p>Methane emissions from livestock, rice cultivation</p>
<b>Energy</b>	<p>Climate change demands retreat from fossil fuels, investment in new energy systems</p> <p>Extreme weather can impact oil production (e.g. hurricanes in Gulf of Mexico)</p>			<p>Water a highly energy intensive industry (energy = 40% of water cost in developing countries)</p> <p>Groundwater depletion leads to higher energy use for extracting / desalinizing water</p>	<p>Agriculture a major consumer of energy, both directly (cultivation, harvest, processing, refrigeration, distribution) and indirectly (fertilizer, other inputs)</p>
<b>Land use</b>	Desertification will increase with climate change	<p>Biofuel cultivation leads to increase in demand for cultivable land</p> <p>Deforestation for firewood</p>		Changes in water management (dams, irrigation etc.) can affect land downstream	<p>Increased demand for agriculture land competes with alternative land uses</p> <p>Deforestation for agriculture</p>
<b>Water</b>	<p>Climate-driven changes in precipitation; increased droughts</p> <p>Changes in water availability e.g. through glacial melting</p>	Higher energy costs can lead to higher water costs because of energy used in extracting / pumping / processing it	Changes in land use can affect water management (e.g. wetlands can create resilience to flooding)		Increased water use for irrigation can affect water resources (e.g. shrinking of Aral Sea)
<b>Food</b>	<p>Short term yield variance due to rising temperatures</p> <p>Reduced yields through extreme weather events</p> <p>Reduced yields through changes in precipitation and water availability</p>	<p>Higher energy prices lead to higher food prices as input costs increase (energy, fertilizer)</p> <p>Biofuels create arbitrage relationship between food and fuel, pulling food costs upwards in line with energy</p>	Land and soil degradation reduces acreage available for expanding cultivation	Lower water availability has negative effect on crop yields, can make some crops unsuitable for area	