

CLIMATE CHANGE – NOT JUST A GREEN ISSUE

A MISSION AND PUBLIC AFFAIRS BRIEFING PAPER

Climate change is not just a green issue. It is also a security concern. This was the conclusion of Air Chief Marshall Sir John Stirrup, the Chief of the Defence Staff, when he addressed The Royal United Services Institute, in December 2006. He noted: “Climate change and growing competition for scarce resources are together likely to increase the incidence of humanitarian crises. The spread of desert regions, a scarcity of water, coastal erosion, declining arable land, damage to infrastructure from extreme weather; all this could undermine security. The areas most at risk – the Middle East, South Asia, and the Sahara belt – are already prone to instability; and they are strategically important to the UK. So we will need to act where we can to prevent such crises developing. But we will also have to consider our response, should prevention fail.”

This briefing paper explores climate change as a security issue. It examines how climate change affects a range of policy issues (food, health, water energy and infrastructure), all of which have an impact on migration and conflict. It analyses how this new security agenda is influencing policy debates and subsequent efforts to secure an international agreement on climate change. It concludes by looking at the implications of this debate for how the Church approaches the issue of climate change. It asks

whether the Church needs to concentrate more resources on the social justice and security concerns of many of its partners and members from across the Anglican Communion.

Climate Security – a New Strategic Priority

No one now seriously disputes the overwhelming scientific evidence that suggests that climate change is a serious global threat, which demands an urgent global response. **What is new is that governments are increasingly treating climate change as a security threat.** As John Ashton, the UK’s climate change envoy observed: “If the first priority of any government is to provide for the welfare of its citizens in return for the taxes that citizens pay, then climate change is potentially the most serious threat to this most fundamental of social contracts.”

The devastation caused by Hurricane Katrina to the city of New Orleans in August 2005 underlines how even in a country as wealthy and resilient as the US, the social and economic dislocation caused by such a climatic catastrophe can place huge strains on a government’s ability to provide for its citizens. The economic and security impacts of extreme climatic events in more vulnerable regions such as Africa and South Asia, or more strategically important regions, like the Middle East may be even more dramatic. Given the nature of our interdependent world, the impact of extreme climatic events will be felt not just in the immediate region affected, but also across the international community.

Seen from this perspective, climate change is not just a long-term threat to the environment; it is an immediate threat to human security and prosperity with a fundamental impact across a range of national and international policy areas. Although the impact of climate change might vary from region to region, climate security holds that human kind is dependent on the same complex and fragile web of natural processes that, if pressed beyond a certain point, will be irrevocably compromised by a changing climate. **The new language of climate security recognises that securing a stable climate is a global public good that is essential for all human security and development.**

Governments are slowly, but surely, responding to this wider agenda. In June 2006 the Foreign Secretary announced that “achieving climate security by promoting a faster transition to a sustainable, low carbon global economy” was now a strategic priority for the British government in general and the Foreign and Commonwealth Office in particular. To achieve climate security the government holds that it is necessary to: 1) bring about a change in global investment in low carbon technologies to enable a move to a low carbon economy including establishing an effective carbon market which allows companies to trade carbon credits; 2) make strategies adaptable so they can manage impacts and adapt to climate change and 3) secure international agreement to a realistic, strong, lasting and fair framework of commitments to reduce carbon emissions beyond 2012.

Subsequent speeches by the Foreign Secretary, the Prime Minister and the International Development Secretary

have increasingly framed climate change in the language of security. In doing so, they hope to build a stronger political foundation for international action on climate change. By presenting climate change as a security issue rather than just an environmental or ‘green’ concern, the government hopes that the international community will place the issue at the centre of every aspect of international policy.

The previous Foreign Secretary, Margaret Becket, in the Annual Winston Churchill Memorial Lecture, April 2007, expanded on the government’s thinking on climate security. She stated: “The trap to be wary of here is seeing this (i.e. climate change) as just an environmental problem: a ‘green issue’. Don’t misunderstand me: the potential effects on our biodiversity from climate change range, under different scenarios, from serious to catastrophic. And the image of polar bears on melting glaciers is a simple one that has had a role in raising awareness and drumming up public support. But the, perhaps rather sad, truth is that the international community will not move with the necessary urgency or the necessary resolve if climate change is seen as primarily something that effects insects, animals and plants: although they may in turn hold the key to our own survival. To steal a slogan from Amnesty International, **we need to show that tackling climate change is about saving the human.**”

As part of this strategy, the British government pressed for a debate on climate and security at the United Nations Security Council in April 2007. This move was initially resisted by other permanent members of the Security Council on the grounds that

climate change was a soft rather than a hard security issue and therefore outside the Security Council's remit. The government argued, however, that foreign policy needed to evolve to take account of an unstable climate and uncertain access to resources. This position was supported by passionate interventions from representatives of Ghana and the Democratic Republic of the Congo who illustrated that 'climate security' is a pressing concern for many African countries.

Climate security as a strategic priority of the British government has survived the political transitions at No 10. David Miliband, Margaret Beckett's successor as Foreign Secretary, stated in an interview to the Financial Times, 9 July 2007, that "Miliband's first law of climate change is that you've got to get it (i.e. climate change) out of the hands of environmental ministers and into the hands of Prime Ministers, finance ministers and foreign secretaries". In a subsequent speech at Chatham House, 19 July 2007, he suggested that the government's strategic foreign policy priorities should be cut from an unwieldy nine to a manageable three: climate security; combating radical extremism; and making the EU more effective. Even when addressing the EU, he suggested that the EU needed to renew its mandate and *raison d'être* by becoming an Environmental Union. On this basis, it is fair to say that **climate security is now a core foreign policy priority.**

Understanding the Challenge

Much of the shift in the government's understanding on climate change is the result of the detailed report by the 2006 Stern Commission. This report

underlined the magnitude of the problem and the challenges involved in managing the transition to a low carbon economy and in ensuring that societies can adapt to the consequences of climate change that can no longer be avoided. The focus of the Stern Commission's inquiry, the economics of climate change, led to the conclusion that the benefits of strong, early action on climate change far outweigh the costs. **The Stern Commission envisaged that the future cost to the global economy of inaction on climate change could be as much as 20% of GDP.** Whereas, the economic cost of tackling the issue head on could be limited to between 1-5% of GDP.

The Stern Commission presented the choice facing decision makers in a manner that underlined the stark societal and economic dislocation following a business as usual model. "Our actions over the coming few decades could generate risk of major disruption to economic and social activity, later in this century and in the next, on a scale similar to those associated with the great wars and the economic depression of the first half of the 20th century. And it will be difficult or impossible to reverse these changes. Tackling climate change is the pro-growth strategy for the longer term, and it can be done in a way that does not cap the aspirations for growth of rich or poor countries. The earlier effective action is taken, the less costly it will be".

The implications of the Stern Commission's predictions, for both the developing and developed world, are immense. But, what is sometimes forgotten in this cost-benefit analysis is the understanding that climate change is already impacting disproportionately on many of the

world's poorest communities. The irony of this, which is not lost on a number of governments in the developing world, is the perception that climate change is a developed world problem for which the developing world is paying the price. President Museveni of Uganda was the first African leader to describe climate change as an act of aggression by the rich against the poor. He is unlikely to be the last. Western governments are slowly acknowledging their culpability for this situation. In a speech to the United Nations, 31 July 2007, the British Prime Minister, Gordon Brown stated: "We know that the gains from global prosperity have been disproportionately enjoyed by the people in the industrialised countries and that the consequences of climate change will be disproportionately felt by the poorest who are least responsible for it – making the issue of climate change one of justice as much as economic development."

The polarisation of positions between those adversely affected by climate change and those responsible for causing the changes reflects the concern that climate change is becoming a major obstacle to continued poverty reduction, with all that that implies for human security. **Climate change threatens to push many communities still further into poverty** and in so doing, frustrate the efforts by the international community to deliver on the Millennium Development Goals. Goals that already looked distant now appear elusive. In addressing the painfully slow progress in realising these goals the British Prime Minister stated in his address to the United Nations, 31 July 2007: "There is no trade off between meeting our goals on

economic development and meeting our goals on the environment and climate change – that tackling poverty is just not possible without also tackling climate change. Indeed economic progress, social justice and environmental care now go together. That is why Millennium Development Goal seven – that we ensure environmental sustainability – is central to what we do."

Part of the problem, is that many developing countries are especially vulnerable to climate change because of their geographic exposure, low incomes and their greater reliance on climate sensitive sectors such as agriculture. The Fourth Report of the Intergovernmental Panel on Climate Change - the IPCC - reported in 2007 that by 2070 between 70 and 250 million people in Africa are expected to be exposed to an increase of water stress due to climate change. This will have a significant impact on food security in some countries in Africa with yields from rain fed agriculture being reduced by up to 50% by 2020. Falling farm incomes will increase poverty and reduce the ability of households to invest in a better future. This will force them to use up meagre savings just to survive. This will inevitably have a knock on effect to educational standards as children, especially girls, are withdrawn from school, to assist with securing alternative sources of household income.

The relationship between food insecurity, malnutrition and health is well documented amongst development experts. Malnutrition is a health outcome in itself, but it also lowers natural resistance to infectious diseases by weakening the immune system. Climate change will potentially exacerbate this

vulnerability since changes in temperature and precipitation are likely to increase the geographic range of vector-borne diseases such as malaria, cholera and diarrhoea. This is likely to generate higher morbidity and mortality rates among people, especially children, suffering from malnutrition than among food secure people.

The loss of low lying landmass in coastal areas, which could be ravaged by storms and increases in sea levels, is likely to lead to displacements of populations, loss of life and damage to infrastructure. It is anticipated that rising sea levels could displace millions in Bangladesh alone and add a dangerous new dynamic to an already tense region. In some countries, like Tanzania and Ghana for example, the effect of even a small rise in sea level is already being felt, in the form of fresh water sources contaminated by salt water, or of increased coastal erosion. Both Ghana and Tanzania are highly dependent on hydroelectric power, but they have suffered power shortages in the recent past as a result of unusually low rainfall.

There are real human costs associated with climate change. **The Stern Committee predicts that up to an additional 145-220 million people could be living on less than \$2 a day and there could be an additional 165,00-250,000 child deaths per year in South Asia and sub-Saharan Africa by 2100.** Responding to these statistics, Desmond Tutu observed: “The human impact of climate change is obvious, but what is not so apparent is the extent to which climatic events can undo the development gains put in place over decades. Droughts and floods destroy lives, but they also

destroy schools, economies and opportunity.”

The impact of climate change on developing countries has the potential to stimulate unprecedented levels of migration. A report produced by the Ministry of Defence’s Defence Concepts and Doctrine Centre, *Global Strategic Trends Programme 2007-2036*, noted that rising sea levels, advancing desertification and other climate driven changes, such as falling crop yields, could drive millions of people to migrate north. The report claims that “food and water insecurity will drive mass migration from some worse affected areas and the effects may be felt in more affluent regions through distribution problems, specialised agriculture and aggressive food pricing”.

Studies, such as that undertaken by the Defence Concepts and Doctrine Centre, estimate that a sea level rise of just two centimetres – well within current estimates – would displace two million people from the Nile delta, an area which is currently Egypt’s agricultural heartland. It is difficult to predict what the human security implications would be of such a large displacement. But, displace 2 million people from one of the most fragile regions of the world and there will be an impact – not least on Egypt’s internal security and stability. Similar potential trouble spots are identifiable around the world, in South Asia where it is anticipated that up to 1 billion people might be affected by increased water stress.

Drought and other climate-related shocks risk sparking violence and conflict. Resource driven conflicts are not new, but in climate change there is

a potentially new and deadly dynamic
A major contributing factor to the conflict in Darfur - a conflict in which 200,000 people have already died – has been a shift in rainfall patterns that has put nomadic herders and settled pastoralists into conflict with one another. The United Nations Development Programme reported, June 2007, that deserts had spread southwards by an average of 63 miles over the past four decades. During the UN Security Council debate on climate and security the representative from the Congo stated: “This will not be the first time people have fought over land and resources – but this time it will be on scale that dwarfs the conflicts of the past”.

The risk of resource related conflicts will also affect regions strategically important to the UK national interest. **The Middle East, for instance, contains 5% of the world’s population, but only 1% of the world’s water.** This ratio will become more unfavourable with climate change. Disagreements between Israel and its Arab neighbours over water access to the Jordan basin have always been a source of tension. These tensions are likely to increase as climate change causes further depletion to the water basin. It is striking that even now, the question of what constitutes a viable two state solution is as much dependent on resolving disputes over access to natural resources as it is on resolving the status of Jerusalem.

Responding to the Challenge

The findings of the Stern Committee have fuelled a plethora of policy initiatives, nationally, regionally and internationally. Nationally this has seen the British government introduce

a Climate Change Bill that aims to reduce CO₂ emissions by 26-30% by 2020 and 60% by 2050. Regionally, this has resulted in the European Commission’s proposal in January 2007 committing the EU to a “unilateral” 20% reduction in greenhouse emissions by 2020, or 30% in the context of a broader international agreement. Agreements such as these contributed to a commitment by the G8 states meeting in Heiligendamm, Germany, to work towards a new international framework on climate change to replace the Kyoto protocol in 2012. Negotiations for a successor framework agreement on climate change will commence in December 2007.

Common to all these initiatives is the acceptance that global emissions of CO₂ greenhouse gases need to be stabilised before global warming exceeds a 2 degree Celsius rise in global average temperature. As a result, the focus of much of this activity is on mitigating the effects of climate change by significantly reducing CO₂ emissions. Managing this transition requires a de-coupling of economic growth from carbon emissions, which in turn requires a fundamental change in the way that energy is produced and consumed. The International Energy Agency estimates that the world will need to invest some 21 trillion dollars in the energy sector between now and 2030 and that the bulk of this money has to flow in the direction of low carbon and energy efficient investments.

Securing this transition has been likened to the greatest public-private partnership of all times, with governments setting the regulatory framework to encourage investment and trade in low carbon goods and

services, and business providing the necessary entrepreneurship and innovation to realise a low carbon economy. It is important, however, that any technological advances are shared broadly across the international community. Governments need to allow developing countries to manufacture patented clean technology so as to help address existing energy shortages and to help avoid the problem of rapidly rising emissions in these countries as their economies grow.

A number of mechanisms already exist to encourage greater flows of finance to bridge the funding gap to improve access to clean energy and development. These facilities include the Clean Development Mechanism under the Kyoto protocol, and the Clean Energy Investment Framework that was launched at the 2005 Gleneagles G8 Summit. Yet, there is a feeling in many African countries that existing mechanisms have so far bypassed Africa. George Edgar, the Foreign and Commonwealth Office's envoy for climate change in Africa noted in a speech to Chatham House, 23 May 2007, that out of the existing 645 registered Clean Development Mechanisms, only 16 are in Africa, of which seven are in South Africa and seven north of the Sahara.

There are a number of reasons for this imbalance not least the importance of targeting increased financial flows, short term, to countries like India and China – countries which threaten to become major emitters of CO₂ within a relatively short period of time. It is anticipated that China will overtake the US as the largest emitter by 2009. However the case remains, that **if the international community wants to see and to assist clean sustainable development in Africa then it must**

ensure that the funding is there to support it. The international community needs to take steps to ensure that this new economy empowers the development of many of the poorest countries rather than contributing to their further marginalisation.

A key ingredient in this process will be the creation of a global carbon market, similar to the EU's Emission Trading Scheme or the Chicago Climate Exchange, but writ large. To be sustainable, however, any global agreement needs to have the support and the participation of developing countries. To be effective this global carbon market must take account of the tiny carbon emissions of many of the least developed countries, but in a way that does not hinder their own economic growth. As the British prime ministers acknowledged in his UN address, 31 July 2007, the challenge is to involve the private sector "in designing a global carbon market that genuinely benefits the poor".

If emissions were allocated to all countries on a fair and equitable basis there would be enormous scope for poor developing countries to trade avoided growth in carbon emissions with more polluting developed countries. But, as Hilary Benn, the former Secretary of State for International Development, observed in April 2007: "To allow Africa to fully benefit from carbon trading the market rules need to include sectors like forestry – including avoided deforestation. Right now, the biggest scheme, the Emissions Trading Scheme, does not recognise reductions based on avoided deforestation – one of the most important sectors for African

economies and poor people's livelihoods.”

Unless steps are taken to include such important market sectors then it is difficult to see how the emergence of a new global carbon market will fulfil its primary objective, a reduction in carbon emissions. The dilemma facing many governments as they negotiate this new market is highlighted by a recent report by Greenpeace titled *Carving Up the Congo*. Development experts have long recognised the relationship between deforestation and poverty, and the pressures that many countries find themselves in to issue logging concessions even though that results in a conversion of forest to relatively low return uses. The DRC government has the opportunity to raise significant capital by issuing logging concessions. Yet, the Congo rainforests of Central Africa are of global importance as they form the second largest rainforest block on earth after the Amazon rainforest, covering more than 172 million hectares. Greenpeace estimate that 34 million tonnes of CO₂ could be released if logging destroyed this forest area. This figure is equivalent to the UK's entire carbon output since 1946.

Mitigation – and the level at which it is possible to stabilise atmospheric concentrations of greenhouse gases, will determine the level of climate change impacts felt by developing countries, as it will for the world as a whole. But within developing countries adaptation will be the key – adaptation to reduce vulnerability to the impacts of climate change that are already inevitable. Adaptation covers a host of issues from ensuring that climate data and predictions are fed into agricultural and health planning,

to responding to the predicted rises in sea levels by either improving coastal defences or by moving large settlements further inland.

To secure the necessary levels of adaptation, developing countries will need significant external financial assistance. The Stern Commission noted: “People will adapt to changes in the climate as far as their resources and knowledge allow. But developing countries lack the infrastructure (most notably in the area of water supply and management), financial means, and access to public services that would otherwise help them adapt”. This money cannot simply be channelled from existing aid budgets in a way that undermines the international communities' existing development commitments. There is a need for urgent action here since adaptation measures will become harder and harder to implement as societies face increasing costs stress from the consequences of climate change.

Adaptation is no substitute for development or even an add-on to development. **To be effective, adaptation and development policies need to be linked.** The main challenge, in the first instance, is to mainstream or integrate climate issues into government policy making and into donor planning. Developing countries, for instance, need to factor into their plans for further investment in public health infrastructure the increased threat of natural disasters and growing water stress. Similarly, development programmes and policies have the potential, if properly targeted, to influence the ability of developing countries to adapt to climate change. For example, policies for forest conservation and sustainable energy will, if correctly targeted and

implemented, enhance the resilience of communities and thereby reduce the vulnerability of their livelihoods to climate change.

At present such adaptive efforts have been hindered by a lack of data as to the vulnerabilities and priorities for adaptation of a number of least developed countries. Where data exists, it tends to be very approximate and top down rather than based on disaggregated estimates. Steps are being taken to correct this imbalance as illustrated by the joint venture between the Department for International Development and the Canadian International Development Research Centre to investigate how African Countries can adapt to change. Yet such research, while helpful, is piece meal and top down.

The international community needs to assist developing countries to engage more, not only in global climate observations and modelling through the Global Climate Observation System (GCOS), but in smaller regional modelling that can provide location specific results. Based on such predictions, a better mapping of vulnerabilities can be undertaken – establishing which coastal areas are likely to suffer from a rise in sea level, which diseases are likely to be more prevalent and where they might be concentrated and, what crops are likely to face declining yields, for example.

Conclusion

This briefing paper has demonstrated that climate change is no longer an ‘environmental’ protection issue, but one intimately connected with a wider world. Given the scale and urgency of the challenge, many of the decisions

critical for global climate security and the effective transition to a low carbon, high-efficiency economy will take place outside the field of climate change. It is the decisions made in the areas of foreign and trade policy, security and geopolitics, energy policy and investments that will have an influence on the global response to climate change. As the implications of climate security become more noticeable, and as the negotiations gear up to find a way forward in a post 2012 world, climate change related issues, which were once marginal and peripheral concerns to international decision makers, will become an ever larger part of international relations.

How then should the Church respond to and contribute to the shaping of this the new agenda? The answer depends in part on the Church understanding that the connections between climate change and other issues are not only a driver for action, but also a necessary part of the response. **If the Church wishes to drive this agenda forward then it needs to connect climate change with other issues and to then formulate its own response in a way, which can achieve multiple aims.** This requires mainstreaming climate change into the wider mission of the Church, not least by recognising more clearly the inter-linkage between the Church’s calling “to strive to safeguard the integrity of creation and sustain and renew the life of the earth” and its mission to “to seek to transform unjust structures of society”.

This briefing paper has suggested that one method of doing so is by the Church making more visible the connection between climate change and human security. Climate change poses a serious, ongoing threat to

human development and human security. The outlook for many of the least development countries, especially those in Africa, under a business as usual model is bleak, even though these same countries have some of the lowest per capita emissions of greenhouse gasses that contribute to global warming. The likely impact of climate change thus presents a global ethical challenge as well as a development and scientific challenge. This is a connection which governments and international organisations are already sensitive to, even if, as this briefing paper has suggested, their subsequent actions have fallen short of what is generally thought necessary to correct the situation.

The Church is in a unique position to make a powerful and timely contribution to this debate, but in a way that recognises the human security concerns of many of the world's poorest and most vulnerable communities. In the past, the Church has sought to respond to the scandal of poverty by pressing for further international action on debt, trade and aid. This social justice agenda has seen the Church playing an active role in the Jubilee 2000 Campaign, the Trade Justice Movement and MakePovertyHistory. Climate change, however, threatens to undermine many of the development achievements of the last decade. The human security dimension of climate change therefore requires the church's urgent attention. As Professor Richard Odingo, the Vice Chair of the Intergovernmental Panel on Climate Change, acknowledged: "Climate change will make it impossible for the world to achieve the Millennium Development Goals. Poverty will increase. Food security is bound to get worse." Or, as Nazmul Chowdhury of

Practical Action rather more bluntly put it: "Forget about making poverty history. Climate change will make poverty permanent".

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