White Paper Review:

CLIMATE CHANGE AND ENVIRONMENT

In all countries, economic and social progress are dependent upon the health of the environment. Environmental assets (such as fertile soils, clean water, biomass and biodiversity) yield income, offer safety nets for the poor, maintain public health, and drive economic growth. But conversely, environmental hazards (e.g. pollution, environmental damage, and climate change) all threaten livelihoods and development. Poor people and countries are especially dependent on environmental assets and are vulnerable to hazards: the World Bank estimates that environmental assets provide 26% of the national wealth in Least Developed Countries, in comparison to around 2% in OECD countries.[i]

However, it is now considered inevitable that climate change will threaten the lives and livelihoods of humans around the world, especially poor people. As a result, previous gains in development are being reversed – leading to a loss of 5-20% World Gross Product by 2050, with 55-90 million more people living in extreme poverty and 100 million more suffering hunger.[ii] Real 'tipping points' are looming in environmental, social and environmental systems, but our governance and financial systems cannot cope with such linked change.

While we are currently aware of the climate change boundary, others are coming closer but are insufficiently recognised. The Millennium Ecosystem Assessment of 2005 revealed how the environmental foundations of development are threatened. It calculated that 60% of ecosystems are now degraded with, for example, 75% of marine fisheries fully or over-exploited, and a freshwater fish crisis imminent. In 2009 an authoritative paper in *Nature* identified the world as having exceeded three of nine interconnected 'planetary boundaries'. Thus a future policy emphasis on climate change should extend to other linked areas of environmental vulnerability, and to the ways in which the economic drivers of this unsustainability can be redirected in ways that benefit all.

The current interest in the concept of 'green economy' is intended to provide a more coherent and comprehensive basis for future efforts to address this cumulative set of challenges and maximise effective use of assets to enable poor countries and people to increase their resilience to change and uncertainty.

Climate change mitigation and adaptation

Climate change poses two key global challenges: 1/ to reduce green house gases emissions sufficiently to avoid further climate change (CC **mitigation** or 'avoiding the unmanageable') and 2/ dealing with the present and increasing impacts of climate change (CC **adaptation** or 'managing the unavoidable'). These demand both domestic[iii] and international responses.

Ireland recognises that while climate change threatens all countries, it is the world's poorest and most vulnerable nations and their peoples that suffer most. Failure to address climate change will significantly undermine the Government's ODA programme and derail progress made globally towards achieving the Millennium Development Goals. The science and evidence base on climate change has grown considerably; yet global green house gas (GHG) emissions continue to rise, driven in part by land use changes and the growing demand for energy and fossil fuels. The impacts of climate change (such as changing precipitation and sea level rises) can multiply existing environmental problems.

At the Copenhagen Climate Change Summit in December 2009, Ireland affirmed that it would meet its international climate commitments and play a full role in agreeing a new comprehensive global climate agreement. Ireland has also agreed to allocate up to €100 million during the period 2010-2012 to climate change mitigation and adaptation. Within the UNFCCC negotiation process the international community has committed to provide a total of US$10 billion annually over the three years 2010-12, and to provide US$100 billion per annum by 2020, to help developing countries to take necessary climate change actions. Ireland has agreed to contribute up to €100 million during the period 2010-2012. This contribution is being provided under the Votes of the Department of the Environment, Community and Local Government, which has the lead role on the international climate change negotiations, and the Department of Foreign Affairs and Trade, which manages the Government's overseas development aid programme.

Regarding **mitigation**, developing countries need support to adopt 'low carbon' development pathways, through investments in renewable energies, forestry, green agricultural practises, transport and energy efficiency programmes. Support for such 'green economy' initiatives addresses the key linkages between environment, economic growth, poverty reduction and social development. By 'greening' our development investments Irish Aid will be building greater resilience into its own programmes and those of its partner countries and organisations, for the increasingly significant global economic and environmental opportunities and challenges that lie ahead (including expected significant climate finance).

Dealing with the climate **adaptation** challenge, our development programme needs to respond to climate change as a key additional driver of the world's poorest people's vulnerability. Failure to adequately address climate change could result in diverting needed development support into humanitarian interventions, in response to the increasing incidence of adverse weather events, droughts, floods, typhoons etc.. building climate resilience into our overseas development aid programmes involves an increased focus on areas such as social protection, disaster risk reduction, hunger and food security, conservation agriculture, crop development, diversification of livelihoods and other climate relevant activities, ensuring that the livelihoods of the most vulnerable, and in particular the livelihoods of women and girls are made more resilient to climatic and other shocks.

Over the coming decade climate finance transfers from high income to middle and low income countries looks set to dwarf official aid flows, but the links between the two are still very unclear. Climate-resilient poverty reduction will not be cheap: making the MDGs in Africa resilient to climate change over the next decade was recently estimated to be 40% more expensive than in a non-climate change affected scenario.[iv] Ireland should continue to engage in dialogue on how climate finance can take on board lessons from aid effectiveness about the need to align with, and support, national development and policy.

Emerging issues and approaches

The last three years have seen increasing attention to green economy (GE) and green growth. Governments, corporations and development agencies are considering it as a possible way forward in a world threatened by linked crises of climate change, environmental degradation, social exclusion and economic instability. It has gained such prominence in international debates that it is one of the two major themes selected for the 2012 Earth Summit in Rio. This has generated controversy, with many developing countries calling it a potential distraction from already agreed global commitments on sustainable development.

Much of the debate on green economy has been conducted in G20 countries including rapidly-developing MICs, with an emphasis on high-technology low-carbon solutions and correcting banking

and corporate failures. This has met with alarm in many low-income countries which see GE as a threat to their competitiveness. There are suspicions about the agenda of the industrialised countries promoting the green economy concept, and fears that an international agreement generated by the Earth Summit could fail to address the structural issues within the global economy that perpetuate poverty, inequality and resource degradation. There are worries that an emphasis on technological solutions could generate global economic growth without creating new jobs in the South to replace those lost in the recent economic collapse. Other concerns are that a global green economy agenda could create an excuse for wealthy countries to erect commercial barriers to goods from southern countries, thus undermining their competitiveness, and that it could increase pressure to turn environmental goods and services into commodities, threatening the ways in which they support local people.

Ireland can play an important role, with other development actors, in exploring how a 'fair green economy' approach can address the priorities, threats and opportunities of least developed countries. Despite the above concerns, there is a growing body of analysis which indicates that a set of development-focused green economy policies and tools can be highly attractive and applicable for poor countries. The box below summarises the basis for this thinking, which is being actively explored by agencies such as Danida (which incorporated a GE focus in its 2010 Strategy); DFID (which is currently exploring scope to incorporate GE as a key element in future policy and programmes); OECD (which has developed an extensive body of work on green growth); and the Poverty-Environment Partnership (a multi-agency initiative including Irish Aid, which is developing a joint analysis of GE and development for the 2012 Rio Summit).

Why does the world need green economies?

1. Economic security and human wellbeing are dependent on natural systems
2. Yet much economic activity damages natural systems and creates poverty
3. Economic inequality exacerbates this, as fewer actors make resource use decisions
4. Certain policies, such as subsidies for fossil fuels and corporate accountability frameworks, are clear causes – but are entrenched by vested interests
5. A few policy and market innovations reveal ways forward – but are not at scale
6. The problem is systemic: debt-fuelled, consumption-based growth with insecure jobs is so entrenched that we rely on it to solve the problems it creates
7. Thus a spiralling confluence of crises in economic, natural and social systems is beginning to exceed system thresholds
8. Thus we need a system-wide effort to put 'people' and 'planet' into the heart of economic thinking, governance and management.

[from 'A Green Economy Framework: To inform dialogue, diagnosis and strategy' (Steve Bass, IIED Working Paper August 2011)

In addition a number of Southern countries are actively exploring the relevance of the concept to their own future planning. Ethiopia's President Meles Zenawi said recently that the country is keen to pursue green growth as the next wave of industrialisation, utilising the huge potential from renewable energy they seek to have zero net greenhouse gas emissions by 2025, and transition to 'middle income country' status also by 2025.[v] IIED has supported a series of 'environment mainstreaming' processes, including in Vietnam, Zambia, Malawi and Tanzania, which successfully engaged 'upstream' ministries of finance and planning in assessing the current and potential benefits from better use of environmental assets. In each of these countries there is growing interest

in strengthening the policy framework and capacity to measure and utilise biological diversity and natural capital more effectively to meet national economic and social needs.[vi]

Irish Aid's future agriculture programmes should also build on efforts so far to integrate climate resilience into food security. Three in four people in developing countries live in rural areas and most depend on agriculture for their livelihoods. A recent paper by Irish Aid and IIED outlines the roles that conservation agriculture, livestock management and agroforestry can play in supporting climate-smart agriculture, both in terms of soil carbon sequestration, and improved resilience for rural communities to climate impacts [vii] For example, 'extended peer communities' in Ethiopia, which provide farmer-led operational research, have already proved a valuable source of practical solutions to the challenges faced by farmers. Here, farmers, nongovernmental organisations, universities, agricultural research centres and government departments have worked together, through consortia, to identify new plant breeds and innovative farming techniques, and to improve soil and water conservation and strengthen land tenure.

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[i] World Bank. 2005. Where is the Wealth of Nations? World Bank.

[ii] Stern N. 2007. The Economics of Climate Change: The Stern Review. Cambridge University Press

[iii] Domestically, and dealing with mitigation first, Ireland, as one of the highest per capita global emitters of greenhouse gases, is challenged to reduce its GHG emissions in line with scientific advice (reduce emissions by more than 80% below our 1990 levels by 2050). With adaptation, amongst other challenges Ireland has to deal with changing precipitation patterns and sea level rises, requiring significant investment to secure future fresh water needs and building our river and sea defences.

[iv] CDKN. Aug 2011. Climate Change and Poverty Reduction: Policy Brief. Climate and Development Knowledge Network.

[v] Speech to Green Growth Forum Copenhagen, Oct 2011.

[vi] See www.environmental-mainstreaming.org

[vii] IIED and Irish Aid. 2011. Agriculture, Mainstreaming Environment and Climate Change. (http://www.irishaid.gov.ie/Uploads/1%20Irish%20Aid%20Key%20Sheet%2001%20Environment%20Climate%20Change%20and%20Agriculture_final.pdf)