

Preparing the Road to Paris

John Sweeney

Introduction

Some of the younger activists at a recent United Nations Climate Conference sported tee shirts which read: ‘You have been negotiating about climate change since before I was born!’. Indeed, the seemingly intractable negotiations which began with the First Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) in Berlin in 1995 have been in essence a spectacular failure. These negotiations have been unable to deliver a global agreement capable of offering hope to the next generation that the inexorable rise in greenhouse gas emissions can be contained at a level that does not endanger their wellbeing, and the wellbeing of the entire planet.

This kind of agreement is, however, at last within reach – or is it? The forthcoming 21st Conference of the Parties (COP21) in Paris, from 30 November to 11 December 2015, is eagerly anticipated as offering the prospect of an agreement capable of bringing about reductions in carbon emissions sufficient to limit the rise in global temperature to no more than 2°C above pre-industrial levels. A rise in temperature in excess of this would commit the world to unavoidable ‘dangerous climate change’.

Careful ‘choreography’ has produced an expectation that, at last, what Pope Francis referred to as the ‘Care for Our Common Home’ will be prioritised over narrow national self-interests and powerful vested interest groups. The background to this prospect and the chances of success are addressed in this article.

Background Preparation

Some 50,000 people are expected to attend COP21, such is the level of anticipation. There is, however, an eerie sense of *déjà vu* – a feeling that we might be facing a repeat of what happened at the ill-fated COP15 (Copenhagen, 2009). Then, as now, expectations were high: 119 Heads of State or Heads of Government from 192 countries were joined by 40,000 participants to ‘seal the deal’. But negotiations foundered on a lack of trust between the developing countries and the developed countries, an unwillingness to subordinate national

self-interest to community good, and a carefully timed campaign of misinformation and attempted discrediting of leading climate scientists, a campaign collectively termed ‘Climategate’.

Six years on, the groundwork for COP21 has been more meticulously laid out and an evidence-based approach more solidly integrated into the procedures. Three pillars support this: the science, the ethics and the politics of climate change.

The Scientific Preparation

The Assessment Reports of the Intergovernmental Panel on Climate Change (IPCC) have always been seen as providing the underpinning for evidence-based policy initiatives. The First Assessment Report in 1990 provided an important impetus to the United Nations Framework Convention on Climate Change (UNFCCC) which was adopted in 1992, while the Second Assessment Report in 1995 was influential in persuading delegates at COP3 (Kyoto, Japan, 1997) to agree the Kyoto Protocol.

The protracted efforts to ratify Kyoto spanned almost a decade, during which political rather than scientific considerations became paramount, to the extent that, despite the IPCC Third Assessment Report of 2001, significant progress towards a comprehensive global agreement stalled. By 2007, and the Fourth Assessment Report, some momentum was restored and an elaborate ‘roadmap’ set the scene for COP15 in Copenhagen. The optimism was misplaced. Despite the ‘roadmap’ so carefully laid out in advance, the negotiations ended up in a cul-de-sac. European leadership of attempts to tackle climate change was lost and a new world order emerged which was more based on narrow national, rather than global, priorities. Recovery from this failure has been tortuously slow.

The publication, in 2013, of the Fifth Assessment Report (AR5)¹ has, however, injected a new sense of urgency into the build-up to COP21 in Paris. AR5 produced greater certainty about several aspects of climate change, based on better observations, better modelling and improved understanding of the complexities of the underlying

science. The headline statement that, ‘it is at least 95% likely that human activities – chiefly the burning of fossil fuels – are the main cause of warming since the 1950s’, was accompanied by a number of key findings, as follows:

- Global temperatures have increased by 0.85°C over the period 1880–2012 and about 0.5°C over the period 1979–2010. Slower warming occurred over the 15 years prior to 2013.
- The warming has been greater over land than over the ocean and greater in mid to high latitude parts of the globe. Heatwaves have increased in frequency. Each of the last three decades has been warmer than all preceding decades since 1850; moreover, 1981–2010 was the warmest 30-year period of the last 800 years.
- Global precipitation has not changed significantly over the course of the twentieth century. An increasing precipitation trend exists in middle and high latitudes of the northern hemisphere, strongly evident after the 1950s. Intense rainfall events have significantly increased in frequency in a majority of regions, especially Europe and North America.
- Tropical Atlantic storms have increased in intensity, though trends in other areas are not clear.
- Greenland’s ice sheets are melting much more quickly in recent years, with average losses per year six times higher than in the early 1990s. In the Arctic, sea ice cover has decreased by 4% per decade since 1979 and winter sea ice thickness has halved. The Antarctic ice sheet is now losing mass five times faster than in the early 1990s.
- Sea level rise has accelerated from 1.7mm per year over the twentieth century to 3.2mm per year over the past two decades.

Warming has continued in recent years: 2014 was the warmest year since reliable records were kept² and there is a high probability that 2015 will be warmer still, aided by the El Niño conditions present in the Pacific Ocean.

Should emissions continue to rise on their present trajectory, models project only a 50:50 chance that a global warming of 4°C (relative to pre-industrial levels) can be avoided by the end of this century. This would have very serious implications for much of humanity and the natural world.

However, perhaps the most influential finding of AR5 was the conclusion that global temperatures were closely related to the cumulative emission of carbon dioxide. Essentially, the long residence time of the gas in the atmosphere means that the effects of emissions on temperature are felt for a century or more. The consequence of this is that, once a certain total of emissions is exceeded, a specific temperature threshold will eventually be crossed.

Accordingly, to have a 50:50 chance of limiting total human-induced warming to less than 2°C relative to pre-industrial levels would require cumulative CO₂ emissions from all anthropogenic sources since 1870 to remain below about 3,000 GtCO₂. However, over 1,900 GtCO₂ has already been emitted. At current rates of emission increase, therefore, there is only a very narrow window of opportunity – about two decades – to achieve the radical cuts in emissions required to avoid inevitable dangerous climate change. Such a sobering reality has finally begun to permeate the public and political consciousness.

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The IPCC does not conduct original research. Rather, it provides a synthesis of existing knowledge, based on extensive analysis of the peer-reviewed scientific literature. Some 3,605 experts provided 142,631 comments on AR5, all of which were tabulated and responded to by the author teams comprising 831 individuals. Possibly, no document in history has been more extensively reviewed prior to publication. Accordingly, while the IPCC does not make policy recommendations, the scientific case for action is robust and provides a compelling justification for radical decisions to be taken in Paris.

The Moral and Ethical Preparation

When he visited Dublin in May 2015 the UN Secretary-General Ban Ki-moon said: ‘Ireland has been a champion of efforts to counter hunger, but today one cannot be a leader on hunger without also being a leader in climate change’.³

In this statement, Ban Ki-moon was expressing the basic principles of climate justice. As with many hazards, those least responsible and least able to withstand the impacts bear the brunt. The burden of climate change falls most heavily on the developing world. The World Health Organization estimates that as many as 150,000 excess deaths occur annually due to the direct and indirect effects of climate change, a figure that is expected to rise to 250,000 between 2030 and 2050.⁴ Responsibility for this situation rests primarily with the emissions record of developed countries.

Key Principles for Climate Negotiations

Several principles are often invoked as providing a moral compass for COP negotiators.

The *Precautionary Principle* states that where there are threats of serious or irreversible impacts, lack of full scientific certainty should not be used as a reason for postponing actions to mitigate future climate change.⁵ Uncertainties – for example, in model projections – will always exist. But the nature of the ‘planetary emergency’ being faced should not allow preventative action being over-ruled by short-term economic or political considerations.

The *Polluter Pays Principle*⁶ likewise argues that the utilisation cost of the atmosphere should be paid for proportionately by those who pollute it. Burdening society with the costs of a delinquent sector, or the actions of a vested interest group, is not acceptable from a moral perspective.

The *Principle of Intergenerational Equity*⁷ extends this responsibility through time. Exploitation of a resource, such as the assimilative capacity of the atmosphere, must be conditioned by consideration of its impact in reducing the opportunities for sustainability for present and future generations.

The most widely quoted principle at COP negotiations is the *Principle of Common but Differentiated Responsibility*.⁸ This acknowledges that developing and developed countries bear very different levels of responsibility for causing the present problem and should bear differentiated responsibility for addressing it. To exemplify this with reference to a local case, total greenhouse gas emissions for Ireland (with a population of four and half million), amount to *more* than the total for the 400 million poorest people on the planet. Together with other developed countries, Ireland has made a historically greater contribution to causing the

problem than most countries in the developing world. However, it also has greater capacity to mitigate and adapt to climate change than they do. It should, therefore, bear a greater responsibility for both reducing its emissions and assisting poorer countries to adapt to future climate change along a more sustainable trajectory.

‘Common but Differentiated Responsibility’ is clearly the principle that should apply in apportioning the remaining carbon budget. However, national self-interest is the brief given to negotiators at climate talks and in such circumstances a resource with common access inevitably gets destroyed, as explained in Hardin’s classic essay on ‘The Tragedy of the Commons’.⁹



Highlighting the seriousness of the crisis
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Laudato Si'

The most significant event in terms of the moral and ethical case for addressing climate change came with the publication in June 2015 of the Pope Francis’ encyclical, *Laudato Si': On Care for Our Common Home*.¹⁰ It is difficult to overemphasise the scholarly quality and potential impact of this work. What many anticipated as a theological treatise turned out to be a scientifically robust, readable and inspirational document. In this, Pope Francis calls for urgent and far-reaching cuts in greenhouse gas emissions and stresses the need for an internationally supervised agreement to ensure that states deliver on their commitments though action at both national and local levels.

The potential role of *Laudato Si'* as a ‘game changer’ comes, firstly, from its embracing of communities not normally the target audience for encyclicals. On the religious side, Pope Francis draws on the writings of the Ecumenical Patriarch, Bartholomew I of Constantinople, and of a ninth-century Muslim Sufi poet, emphasising the need

for unity in tackling the environmental challenges of water, air and land pollution, but especially in tackling climate change.

On the economic side, he brings together the radical opponents of globalisation from the far left of the political spectrum and conservatives from the other side sensitive to the fact that market economics require to be tempered by social and environmental responsibility to a much greater extent. He emphasises the need to move away from a solely economics-based view of the natural world and reminds us that its protection is essentially a moral and ethical issue. This is a challenging paradigm shift for decision-makers steeped in conventional cost-benefit analysis concepts. Our disconnection with the natural world is leading, Francis says, to an ecological crisis of our own making as our ‘throwaway’ culture destroys ‘our common home’.

All of this is highly relevant to the climate change problem. In a dismissal of deniers and sceptics, the pope identifies climate change as a human-induced problem, rooted in an insatiable quest for unsustainable growth and material consumption.

On the community front, non-governmental organisations and community groups are lauded for their role of holding to account political leaders who shy away from making the hard decisions necessary to address climate change issues effectively. In what amounts to the first endorsement of the environmental movement by the Catholic Church, Pope Francis has moved the debate beyond the concept of stewardship to active caring for the elements of the environment, such as water, biodiversity and the natural and built environment, which are threatened by climate change.

Secondly, the Encyclical emphasises the futility of a piecemeal approach to tackling the issues concerned. Feeling comfortable about tackling poverty is not sufficient. As regards climate change, emissions trading, for example, is seen by Francis as a flawed instrument that does not in itself get to the root of a problem which lies in excessive consumption. Rather, a holistic approach, termed ‘integral ecology’ is necessary to synthesise the multifaceted dimensions of the problem. Only then, can currently difficult-to-quantify components of the environment under threat, such as biodiversity, be recognised for their intrinsic worth and not seen as resources for exploitation. Although such a holistic approach seems an obvious prerequisite

for climate negotiations, the segmentation of responsibilities among government-based negotiators renders it difficult to operationalise in practice. Few have the breadth of vision to see beyond their ‘silo’ and this has rendered elusive the ‘big compromise’ necessary over the twenty years of UN Climate Conferences.

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Thirdly, the Encyclical links ‘ecological debt’ to financial debt. Here the reality that developed countries have enjoyed access to the resources of the environment free of charge so as to propel their development is at variance with their wish to constrain poorer countries in *their* development by demanding that they achieve this in a non climate-threatening manner.

The need of the latter to finance their sustainable development through loans from the former raises the issue of climate justice, an overarching theme of the document. This links human and natural rights to more practical issues of compensation, legal and financial redress and ultimately how the developed world should interact with the developing world politically to ensure that a global accord on climate is achieved. This is where the politics comes in.

The Political Preparation

The UNFCCC was based on an assumption that a ‘top down’ international accord would be achieved, similar to the successful Montreal Protocol of 1987 which led to the phasing out of substances harmful to the ozone layer. Tackling carbon emissions, however, was always going to be a much more demanding task. The failure of the Kyoto Protocol to bring on board a sufficient number of nations to gather the momentum necessary to make meaningful progress further confirmed this, as did the failure of COP15 in Copenhagen.

While a second commitment period for Kyoto was agreed at COP18 (Doha, 2012) several large emitters withdrew or refused to participate. As of September 2015, only 43 states have ratified the agreement – far short of the 144 signatories

necessary for the agreement to enter into force.

Intended Nationally Determined Contributions

As an alternative to the ‘top down’ approach, a ‘bottom-up’ approach has been employed in the build-up to Paris. This has taken the form of an expression of effort at a national level in terms of what each nation, or bloc, considers appropriate to its own circumstances in terms of post 2020 actions. These pledges are known as ‘Intended Nationally Determined Contributions’ (INDCs). The European Union’s INDC commits the EU to a binding target of at least 40% reduction in greenhouse gas emissions by 2030 compared to 1990, with the modalities of how this will be achieved at Member State level still to be finalised.

In November 2015, a synthesis report expressing the aggregate emissions reductions pledged will be prepared as input to the Paris COP. It seems likely that the aggregate effort will fall far short of what is required to avoid the 2°C warming threshold. Pressures to increase the pledged reductions, especially by the developed countries, and to shorten the timescale for effective reductions to be achieved, will undoubtedly be centre stage during the Paris negotiations.

Loss and Damage

The realisation that even with projected mitigation and adaptation efforts, adverse climate change impacts are likely to occur has stimulated discussion on how the issue of loss and damage should be handled in the negotiations. Naturally, a focus on the plight of developing countries is apparent. COP20 (Lima, 2014) adopted a two-year work plan designed to enhance understanding and expertise in areas such as resilience, vulnerability and risk management. Although the terminology conjures up concepts such as liability and compensation, financial redress instruments are not likely to emerge as major issues at Paris unless developing countries lose confidence in the good faith of developed countries to bear the greatest burden of emission reductions. One area in which such a potential pitfall might occur is in climate finance.

Climate Finance

The future main multilateral funding mechanism for fostering climate mitigation and adaptation in developing countries is likely to be the Green Climate Fund (GCF). This facility was established under the UNFCCC to provide finance to developing countries for their mitigation and

adaptation programmes. In its establishment, issues of governance were of primary concern, with the developing countries in particular stressing the need for independence from control by bodies such as the World Bank. Resolution of such issues was finally achieved at COP17 (Durban, 2011) and the GCF, which has its headquarters in South Korea, has now begun to assess project proposals.

The intention of the GCF is to raise \$100 billion a year by 2020. Although this appears at first sight to be an extremely ambitious target, it is worth emphasising that, at present, annual fossil fuel consumption subsidies worldwide are over five times higher, at \$548 billion.¹¹ Pledges to the Fund have been slower to materialise than hoped for and this is currently a major issue for the developing countries. To date, about \$10 billion has been pledged from around 40 countries.¹² About half of this has been formally signed off on, and this has permitted the GCF to commence activities.

Typically, pledges are around \$10 per capita, with the most generous country (Sweden) committed to over \$60 per capita. Among EU states, generally poor contributions have been pledged by Member States in Eastern Europe, with some absent altogether. Member States in Western Europe have generally made more substantial pledges. A notable exception is Ireland, which has not offered any pledge to the GCF as of September 2015. This was a contributing factor to Ireland receiving the ‘Fossil of the Day’ award (decided by a network of 950 non-governmental organisations) at COP20, in Lima.

The Likely Outcomes from Paris

Climate finance will most likely be the deal maker or breaker at Paris. It is important that developing countries are persuaded that developed countries’ contributions to the GCF will not result in commensurate reductions in their development programmes. Developed countries are increasingly integrating climate change funding into their broader development strategy and while the distinctions are often blurred for individual projects, any suggestion of ‘re-labelling’ will be strongly resisted by developing countries. The fact that there was an inconclusive outcome from the Third International Conference on Financing for Development in Addis Ababa in July 2015 has not allayed the fears of the developing countries that unlocking financial commitments from developed countries is proving more challenging than anticipated.¹³

The extent to which a deal achieved in Paris will have legal standing is not clear. The compromise agreed at COP17 in Durban was to seek ‘a protocol, another legal instrument or an agreed outcome with legal force’. The experience with Kyoto suggests that a new treaty would face major hurdles in gaining ratification from some member state governments, such as the USA. Crucially, it is also not clear to what extent the Intended Nationally Determined Contributions (INDCs) would be legally binding, or indeed to what extent pledges made by the developed countries to the Green Climate Fund would be enforceable.

Progress on preparing the way for decisions to be made at Paris continues to be tortuously slow. A draft negotiating text of 89 pages formed the basis for two weeks of talks in Bonn in June 2015; the intention was that the discussions would lead to this document being reduced to a more manageable length but by the end of the talks it had been cut by just four pages.

A wide range of options, from radical to conservative actions, are up for decision in Paris. An emphasis on transparency is indicative of a degree of mistrust still remaining regarding the translation of aspirations into actions. Ultimately, national negotiators will leave the big decisions to the Heads of Government in Paris. Despite what the latter say for public consumption regarding the imperative of tackling climate change, when it comes to making concessions in the international arena, protecting national interests remains the priority for most.

The most likely outcome from Paris is, therefore, an agreement that will be marketed as a political triumph, but fall short of the radical change of hearts and minds necessary to protect the world from 2°C warming over the next four decades. Whatever the outcome, any agreement is not currently scheduled to come into force before 2020, leaving open the possibility that new administrations will row back on their commitments. The one surety from COP21 is that negotiations to strengthen the UNFCCC will continue at COP22 in Morocco in 2016.

Notes

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