Royal Commission on Environmental Pollution

"Institutional Capacity for Adaptation to Climate Change – Synergies, Gaps, Conflicts and Incentives in Scotland and Northern Ireland"

Report from a seminar held in the BMA Scotland Offices, 5 September 2008 in support of the study on Adapting the UK to Climate Change.

The seminar was attended by over thirty people including the Members of the Commission and Secretariat. The 18 guests were officials from both the Northern Ireland and Scottish governments, as well as non-governmental organisations and industry. The discussions were conducted under the Chatham House rule. The following is a summary of the main topics covered in the discussion, and includes comments made by delegates via the questionnaire form they were invited to complete.

For its study, the Commission is focussing on the institutional arrangements necessary for the UK to adapt to the changes in the natural environment brought about by climate change. To help illustrate what these arrangements might be, the Commission is seeking evidence relating to three aspects of the natural environment: biodiversity, nature conservation and protected areas; sea-level and coastal zones, and; freshwater.

The comments here represent a summary of the discussion at the seminar, and have been organised broadly into: major themes; key gaps, conflicts, incentives and synergies that were identified; discussion about institutions and arrangements; other issues that arose from the discussion, and; a summary of the major actors. The comments do not necessarily reflect the view of the Royal Commission on Environmental Pollution.

Major Themes

The discussion covered a wide range of topics and most definitely brought areas to the attention of the Commission that may not have otherwise been apparent – the Commission was hugely grateful for the discussion in groups and plenary session as this provided an extremely fast method of learning about some of the issues that are of particular relevance and importance to Scotland and Northern Ireland. Some themes emerged from the discussions that were common to many organisations, and these are summarised below.

From a discussion about institutional arrangements necessary for adapting to climate change, a widely supported conclusion was that no more institutions are required, although it was agreed that this proposition needs to be tested further. Rather, the opinion was that there should be better alignment of the existing institutions and they should be used more effectively. Central government should act as an enabler rather than a director, and create the conditions for local and regional actions.

The other point that became particularly clear was the differences between Scotland, England and Northern Ireland – the issues of importance, the political agendas and the mechanisms for delivery are all very different, and no assumptions should be made that things are automatically the same across these different regions.

There was widespread support for embracing the language of uncertainty, risk and for adopting probabilistic models when discussing adaptation to climate change. Furthermore, it should be accepted that complexity is inevitable, and there will need to be a range of approaches to adaptation, which will be a mixture of deliberate planning, muddling through and winning over hearts & minds.

A theme that emerged was one of mismatches at all levels. Organisations are often restricted in their actions by having to work to two masters; the mandatory requirements placed on them to deliver versus doing things for the public good that would support adaptation. Another mismatch is that between information that is currently available, and that which is needed – these need to be brought together. A further mismatch was identified as being the differences between national and local scales of action; impacts will be felt locally, but national plans often have poor detail at the local level. It was suggested that national planning for climate change does not properly take account of regional variation, especially with regards the Devolved Administrations.

One issue that clearly causes concerns for many people was the level of engagement of politicians on the adaptation agenda. The importance of climate adaptation on the political agenda can depend heavily on the interests of the minister whose responsibility it is, rather than adaptation being seen as an ongoing and overarching priority.

Whilst it was widely suggested that there do not need to be any new institutions, it was accepted that structures and processes are required to enable adaptation to climate change. Leadership is needed to drive adaptation, but it must be remembered that the existing capacity to deliver on adaptation objectives can be overloaded, especially if inappropriate structures and processes are in place. Delivery of adaptation actions may require enforcement mechanisms, which should not be limited to legal enforcement, but should also include tools, good practise, and mechanisms to ensure delivery.

Finally, a significant point that arose from the discussion is the importance of making adaptation relevant to people as individuals and to people as part of institutions – without this relevance, it can be hard for people to relate to adaptation. Organisations need to be exemplars and drivers for adaptation.

Gaps, Synergies, Conflicts & Incentives

- Gaps – one of the major gaps was any detailed consideration of the sea-level and coastal environment. There is a limited awareness of how to plan for and adapt to climate change in the absence of the complete or ‘perfect’ information, scenarios and models, and this can encourage delays in taking action. There is a general gap in knowledge about the extent of impacts, and the details necessary for business to adapt to climate change. Another identified gap was the involvement of the wider public and the business community (noting that the business community is a very heterogeneous term) in the adaptation debate. It was also felt that there is a gap in institutional capacity around land use management and planning.
- Synergies – these have been maximised through the formation of networks and partnerships between organisations that are interested in adaptation as an issue. However, there is not necessarily a concerted effort to seek out win-win situations across the political agenda in order to deliver adaptation benefits. One particularly clear opportunity for synergies is the use of catchment area plans as a framework for land use management and planning – if these plans are made

together, there can be significant benefits for freshwater, biodiversity and land-users.

- Conflicts – there are many conflicts, albeit many of them are not overt, explicit or even necessarily intentional. The main conflicts arise as a function of competing interests or demands, which can best be managed through different institutions working together. One notable area of conflict is the different timescales over which different institutions operate, and the timescales and uncertainty attached to climate impacts projections. The timescale of investments for the business community can vary – big business can be looking at investments for 10-30 years, whereas farming can have much shorter timescales.
- Incentives – these exist in some areas, notably farming, and could be used more widely in land management. However, one incentive that is being underplayed at the moment is that good business and risk management and planning, including business continuity planning, which helps ensure organisations are resilient to changes in the business environment can also provide significant co-benefits by improving resilience to climate change.

Institutions and Arrangements

The discussion covered many aspects of institutions and arrangements which are summarised below.

It was noted that in the devolved administrations it is sometimes easier for ministers, senior civil servants and officials to engage with each other (formally and informally) because in many cases they all work in the same building – this is in contrast to the arrangement in Westminster. It was, however, noted that the capacity of the devolved governments to deliver is limited by the physical and expert capacity of the civil service – this was not made as a criticism but as a statement of fact that the delivery of adaptation actions will require sufficient numbers of appropriately skilled people.

It was suggested that Northern Ireland could consider a rationalisation of institutional actors that have a responsibility for delivering adaptation to climate change. One example of this could be to establish the regulators as being independent of government, which is not presently the case.

It was noted that the climate change bills of both Scotland and England propose a committee on climate change be established, and it was suggested that in terms of the need for institutions that one committee for the UK might be sufficient, and there may be no need for anything further.

When considering the powers of existing institutions to take action to adapt to climate change, it was acknowledged that adaptation should generally be sensitive to local conditions, although it was agreed that there could be a role for some directive, top-down powers. More institutions could get more involved in the adaptation debate than they currently are, and the lack of involvement is perhaps because current powers are very focussed on mitigation of climate change rather than adaptation.

The discussion focussed quite heavily on land use management, and it was suggested that river catchment areas can be a useful management unit. It is anticipated that agriculture and forestry will increasingly operate to catchment area land-use plans in order to improve water management. In Scotland this would be supported by the River Basin Management Plans being developed under the Water Framework Directive, and also the Scotland Flooding Bill.

In Northern Ireland, water is recognised as being a cross border issue with shared responsibility with the Republic of Ireland. The aim in Northern Ireland is to comply with the Water Framework Directive, but there is not going to be a flooding bill.

It became apparent that the Water Framework Directive is a key institutional arrangement that will have a significant bearing on the Commission's study, and that it will be necessary to understand how this is being implemented in the different countries of the United Kingdom.

There was very little discussion about sea-levels and coastal zones, although it was reported that what little work had been done with regards coastal zone management has had limited success.

Issues

Many interesting and important issues came out in the discussion which are very informative for the Commission's work, and are broadly grouped below according to the type of issue. These sections give some context to the background behind some of the major themes, and the gaps, conflicts, synergies and incentives.

Value for Money

The issue of money, the cost of environmental initiatives, and whether they are value for money emerged as one topic of discussion. Different sectors will have different drivers (e.g. environmental, annual returns, politics, economics) when considering the importance of adapting to climate change, but a common question for all sectors will be 'what does it cost?'. It was suggested that the costs of environmental measures should be considered in terms of whether or not they deliver value for money.

Central government is not as focussed on environmental outcomes as related to the spending on environmental issues as it is on other areas of public spending. If the permanent secretaries were focussed on this it would be very powerful as it would ensure that money is being spent most effectively. At present there is no clear understanding of what is meant by Value for Money for government spending on the environment as there is no analysis of the value to the environment or to the economy.

One of the reasons why this has not yet happened is because of variations in the way language is used when evaluating environmental spending and outcomes – if this was better understood then it would be possible to tackle the value for money issue.

At the end of the day, however, a key question is 'What will the public accept?' when it comes to spending on environmental issues.

Land Use and Management

A large part of the discussion was about land-use and how this relates to the areas in which the Commission is seeking information. The way in which land is used is a mosaic, and multiple purposes can be met by any one type of land use. Tourism is hugely important for Scotland and should, therefore, be considered as a significant land user. Furthermore, there are very clear landscape units in Scotland, which could be useful in determining adaptation approaches, and there will soon be a Land Use Summit in Scotland.

Farmers have a significant role with regards land use and management and the Commission leant that the EC is moving towards a risk/crisis fund for farmers to try

and balance price volatility and so provide them with the stability that enables them to manage their land better. It was noted that there is an equity/social justice issue when considering different types of business, as farmers and landowners are generally considered to have the right to run their business as they see fit, whereas other industries are often highly regulated.

Coastal issues were not much discussed in general, although it was noted that in Scotland estuarine flooding is potentially an issue as it will occur on valuable land, and that the Scottish Islands are also at some degree of risk.

Timescales

Any discussion of climate change will always spend some time on timescales, and this seminar was no exception. It was generally agreed that some issues should be treated on a 3-4 year timescale, whilst others need 30 years or longer. Government and agencies tend to look at the mid- and long-term scenarios. When considering, for example, the 50 year timeframe, it is important to ask what is it that needs to be known, who needs to have the information, and who is going to collect/derive the information?

Models and Scenarios

One of the concerns that was raised about the scenarios and models that are used to help inform adaptation policies and actions was whether or not they adequately take account of all of the important local issues and factors? As an example, local geology or soil is not usually taken account of, and in the case of peat, that can have a significant impact on water and soil quality.

It was noted that a UKCIP study conducted with the Scottish Government identified that two-thirds of organisations have used or are aware of the UKCIP scenarios but that virtually none of these organisations used them as the scenarios were not probabilistic. It was also identified that projections for the next 10-15 years can be more uncertain than those for 20+ years, which can be a real problem for strategic investments, as this is the crucial timescale. There is a risk of organisations waiting for perfect information rather than undertaking adaptation actions, and not appreciating that it is generally better to start adapting even without perfect information.

Views and Behaviours

A commonly held view was that adaptation is almost a deceptively simple tag, because in reality it covers a huge range of issues. For this reason, adaptation can be a confusing concept and because of its breadth it may suffer similar problems as the concept of sustainable development, which is also easy to support but difficult to define. Adaptation is further complicated by the focus of climate change currently being on mitigation (apart from perhaps for flooding).

The public and institutions/organisations have a major role to play in adapting to climate change. Work by the voluntary sector in NI to gauge public awareness suggests people do not understand the role of the individual in either mitigation or adaptation and that clarity over these two is lacking. Public acceptance of a changing climate will have a knock-on effect as there begins to be demand for changes led by government. There is a need to make adaptation relevant to the public, and the adaptation needs to be brought home and made personal and delivered by the right messenger. Whilst it would be relatively easy to develop a directorial top-down approach which could deliver adaptation actions, it is unlikely that this would win the

“hearts and minds” necessary to ensure public support and engagement in adaptation. So, perhaps adaptation needs to be more of a voluntary action rather than prescriptive, and perhaps it is the institutions that are required to change rather than individuals; thereby acting as the drivers, supporters and incentivisers for adaptation. Major organisations need to be seen to be engaging with the problem and acting as exemplars that will motivate the wider public to act.

A problem that was repeatedly identified was the danger of silo thinking, especially in sectors of business or government. One example given to illustrate this was adaptation of agriculture to climate change, which will require the environment and agricultural departments of government to work together. The agricultural industry can adapt very quickly, especially if the subsidy system is used to incentivise change, but the environment actors will need to understand how changes in crops could impact on biodiversity and water – are these interactions being looked at?

It was widely acknowledged that a key driver for adaptation was making sure that ministers understood the importance of adapting to climate change.

Private Sector

The role of business and industry in adapting to climate change is particularly important, and there was some consensus that industry is perhaps particularly well placed to address adaptation as an issue because of its extensive experience of using risk management as a normal part of their business practice. There is potentially very little difference between good management plans and good adaptation plans as they will often share the same features and cover many similar issues. Indeed, the insurance industry in particular already uses uncertainty and risk to evaluate their business, and recognise the need to drive change in response to this analysis.

The farming industry plans on a yearly basis, and so it may actually be better to present adaptation as a risk issue to famers as this is a framework with which they are likely to be familiar, and indeed they are used to managing risks on the basis of subsidised incentives.

The fishing industry could be impacted by changes in biodiversity if more warmer water species appear, and a potential problem is that the fishing industry is probably still adapting to the current stresses it faces rather than looking forward to the possible problems posed by climate change.

The tourism sector is of particular importance in Scotland – especially the ski industry, which could disappear entirely, but it was not much discussed in the seminar. Also not much discussed was the role of enterprise networks, although it was felt that these can be powerful bodies for driving change.

A major concern, however, was that currently there seems to be very little information available to assist business with long term adaptation issues. Only the larger businesses can afford to investigate the issues internally. The transport sector has been considering future scenarios that focus on disruption events and the required planning needs. The SMEs however, may have very different short-to-medium term concerns compared to the larger organisations and will need particular help with information etc. The Edinburgh Chamber of Commerce has recently set up a group to help understand appropriate business structures and information needs. There was general agreement that there is a need to make adaptation issues more relevant to business.

Policy and Political

One area of concern was the current institutional arrangements in Northern Ireland, where there is an Environment Minister, but there is no official, statutory body to provide independent comment on the environment, and it was argued that there could be a role for a fully independent 'environment agency'. Such a body would also need to interact with other departments such as Agriculture & Rural Development and Enterprise, Trade & Investment. The differences of the Northern Irish political scene need to be recognised in terms of power-sharing, as the DUP is responsible for environment, transport, and farming, whereas Sinn Fein is responsible for regional development and strategic environment assessments – this situation is quite unlike other parts of the UK.

The government process and public scrutiny need to develop to embrace climate change adaptation so that broad criteria such as adaptation are considered more widely. Furthermore, as new legislation is developed, adaptation should be factored into this wherever possible, as a single legislative sentence in the right place can be enough to have a marked effect. There needs to be better enforcement of existing tools which need to be integrated across all sectors.

Increasingly, there needs to be alignment of agendas across different policy institutions, and overall priorities need to be set that can filter down through organisations. A key aspect of adaptation will be communications between the public and between agencies/actors, and this will be especially important for "event" planning such as floods.

The need to align agendas at a national level needs also to take account of the need to balance local responses with the overall impacts/responses. Adaptation will always need to take into consideration the range of local, national and EC level issues. One area where this could be explored is through Transition Towns (which are linked with the National Parks) as the opportunity for long term planning encourages experimentation.

Major Actors

In identifying who the main actors are with a role in adapting to climate change in Scotland and Northern Ireland, it rapidly became apparent that there is some consensus on which organisations should be involved. These have been broadly separated as: public sector; private sector, and; third sector. In addition to the actors, there is a short description of the roles and context in which these actors may operate, based on what was provided in the discussion.

Public Sector

- Northern Ireland Assembly.
    - Department of Agriculture and Rural Development has an important role
    - NI Environment Agency – this is within the Department of the Environment in Northern Ireland, rather than an independent statutory body
- In Ireland there is the North/South Council which can look at environmental issues in both the Republic of Ireland and Northern Ireland.
- Scottish Government
    - The main role of the Government in Scotland is seen as being responsible for mainstreaming good practice in adaptation and generally raising awareness and providing assistance to other key actors. This support will include advice, co-ordination and provision of business tools to assist with decision making.

    - The Scottish Climate Change Commission (30 people) undertake work on guidance/dissemination and act as a capacity builder.
    - One of the problems with the Scottish Government is that some think it is too big. Different parts deal with agriculture (including payments staff for agricultural policy and programmes), water, soils, air, rural development and so on.
    - Conversely, however, some felt that a great benefit of the Scottish Government is that it is relatively small which makes it easier for networks and connections to be established.
    - Scottish adaptation framework is currently out to consultation
- Scottish Natural Heritage (SNH) – has a role with regards biodiversity, SSSIs, designated sites
- Scottish Environment Protection Agency (SEPA)
    - Implementation of the Water Framework Directive
    - Sustainable flood management
    - Working with the Scottish Government on the Flood bill
    - They are a statutory consultee on planning
    - They conduct Strategic Environment Assessments
- Transport Scotland – they should have a role in flooding and land use planning, not least because in times of flood roads are used by the emergency services and others
- Deer Commission for Scotland – they are working on a land use plan
- Scotland's Environment and Rural Services (SEARS) – which includes:
    - Forestry Commission, SEPA, SNH, Deer Commission, Cairngorms National Park; Loch Lomond National Park, Crofters Commission and others.
- Forestry Commission is a key actor – Forest Enterprise is responsible for land management and testing/trialling new techniques
- The National Parks have a key role, as they are also a planning authority
- Local authorities (and the Convention of Scottish Local Authorities) – they have a role in planning issues which could and should include land and water management
    - At more local levels the Scottish Climate Change declaration (similar to the Nottingham declaration) has been signed by all local authorities, and it exists to provide a focal and coordination point for responses. The degree of activity and engagement with climate change issues tends to be location dependant, with those local authorities in rural locations taking a more active interest. Urban areas tend to focus more on mitigation issues.
    - The Sustainable Scotland Network is seen as a very good medium for publicising and sharing good practice with sustainable development officers, with regular meetings organised. There is potentially a strong role for the Community Planning Partnerships.
    - Local resilience groups – these should have a role in flooding and land use planning
- UKCIP08 will be a huge resource when it is published

<u>Private Sector</u>

- The insurance industry is very used to the risk evaluation approach, which could be quite applicable to the adaptation agenda. Risk management is easier with

infrastructure, but more difficult with things such as ecosystems services. However, industry benefits from ecosystems services, and so it may be important to work out ways of evaluating these risks.

- National Farmers Union – a key role is to translate the information that comes from government and transmit this to their members. They have a key role in winning the "hearts and minds" of farmers and communities in adapting to climate change. They also help to define the policy.
- Scottish Water – they have a strong interest in flood management and land use planning, environmental change and biodiversity
    - Scottish Water and Forestry Commission are exploring ways in which they can unite their strategies for land management.

<u>Third Sector</u>

- The voluntary sector can have a significant role in land use management
- The Woodland Trust
- The NGO lobby in Northern Ireland is very strong, although it was noted that it can be difficult to lobby a power sharing executive
- SNIFFER – they have a wide network of organisations they both work with and for
- Scottish Climate Change Impacts Programme (SCCIP) has several roles, including improving resilience to impacts, and providing a hub for adaptation work.
    - SNIFFER is led by a development group, which includes Scottish Government, SEPA, UKCIP, Sustainable Scotland Network
    - Other involved parties are SNH, Visit Scotland, Transport Scotland, Scottish Whisky Association, WWF, RSPB, SENCE (Sustainability through Environment, Nature, Communities and Enterprise), Scottish Enterprise, Highlands & Islands Enterprise, Communities Scotland
- It was noted that both the Scottish Climate Change Impacts Partnership (SCCIP) and the Northern Ireland Climate Change Partnership (NICCP) are both taking forward the adaptation agenda, and are being quite proactive in this area.
- RSPB/WWF and other similar NGOs are concerned with the status of wetlands, raising awareness and will have a key role to play in land use management.
- It is recognised that conservation volunteers have a role to play. Organisations such as the Red Cross also work on preparing their responses for extreme events.
- Environmental groups – although many are apparently currently still focussed on issues relating to mitigation.
- NGOs can have a significant role in the face of an unsupportive government