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Rural Economy and Land Use Programme

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The changing role of local government in managing water resources

The part played by local government in the sustainable management of natural resources – including water – is growing. But what does this mean in practice, and how can research help local government to meet the challenges of taking on such a central role in a time of political and environmental change?

Policy and Practice notes for local government

Note No. 20
August 2010

The Rural Economy and Land Use Programme is a UK-wide research programme carrying out interdisciplinary research on the multiple challenges facing rural areas. It is funded by the Economic and Social Research Council, the Biotechnology and Biological Sciences Research Council and the Natural Environment Research Council, with additional funding from the Scottish Government and the Department for Environment, Food and Rural Affairs.

Local government is taking on a new strategic role in natural resource management and at the same time is required to implement wide-ranging national policies on community involvement and action. Water is a vital resource and, in a small and crowded country, variations in the water supply may have profoundly negative effects on people, businesses and the natural environment. Land use is also a key factor in decisions about water management. In an era of climate change this is a particularly complex challenge that will require joined up delivery at different spatial scales, and a shift in the roles and responsibilities of different stakeholders, with local government taking a lead.

What areas of responsibility does local government have for water?

The influence local government bodies have on water management is limited but this is changing.

Local government has:

— Responsibility, under the Land Drainage Act (1991), for maintaining a range of local water body and land drainage assets. The new Flood and Water Management Act identifies a lead role for local government in managing local flood risk from surface water, ground water and watercourses other than main rivers. Local authorities also have strong links with Internal Drainage Boards where these exist.

— Responsibilities under Flood Risk Regulations 2009. Lead local flood authorities (unitary authorities or county councils) have to produce flood hazard maps and flood risk maps, and flood risk management plans. This requires close working with the Environment Agency and the documents must be published before the end of December 2011.

— A role in improving the ecological quality of waters via supporting the implementation of River Basin Management Plans arising from the European Water Framework Directive (WFD).

— Responsibilities for environmental health, which gives them a vested interest in the water quality of lakes and sea.

— The lead on preparation and implementation of Shoreline Management Plans in coastal areas.

— Responsibility for spatial planning and planning control, which has implications for factors such as landscape quality, water availability, surface water planning, protection of habitats and flood plains, economic value of farming and potential impacts of climate change.

Can Relu research help to address these problems?

Insights from the Relu programme are potentially far-reaching. They demonstrate the opportunity for more effective methods of stakeholder engagement, alternative governance models, collaboration at different spatial scales and changes to organisational culture, all of which allow for re-deploying resources and finding new capacity. These are particularly applicable within the "Big Society" approach of the coalition government and its new agenda of localism.

The research has revealed the complexity of the problems being faced and the mechanics of partnership working, as well as developing effective methods of communication and engagement with a diverse range of stakeholders. However, finding solutions at a local level will require long term senior level commitment within local government and partner organisations if more integrated management of land and water resources is to be realised.

On flooding:

— **The Floodplains project** has highlighted the role of farmland in flood mitigation, beyond the current emphasis on its role for flood storage. This has received little attention despite evidence that intensification of agriculture and changing land management practices have reduced the infiltration capacity of soils, while drainage systems have been designed to evacuate water from agricultural land more quickly.

— **The Floodplains project** has identified that farmers do not currently see themselves as providing wider flood services in isolation but are interested if this could be joined up with other objectives such as pollution control and the protection of wildlife.

— Local government could play a lead role in bringing together stakeholder groups, brokering discussions and building consensus on flood plain management.

On water quality:

— **The Catchment Management project** revealed a strong local demand from stakeholders for water quality monitoring data. They developed an annual ecosystems report card that provides an easy to understand snapshot of the health of a catchment's aquatic environments for circulation to the general public, major stakeholders and politicians. The report card also raises awareness of changes to the condition of water bodies over time and the effectiveness of improvements in land and water management.

— Results from **the Catchment Management project**, looking at tackling diffuse water pollution, have highlighted the need for local adaptation in policy implementation and the importance of sustained approaches to solving environmental problems. The behavioural change required from land managers is unlikely to be delivered through frequently changing incentive schemes. The research underlined the need for greater access to farm level analytical and advisory services.

— Local government could make water quality data regularly available to consumers in a simple and accessible form, including on-line and printed versions, and publicise examples of good practice in catchment management.

On spatial planning and land use:

— **The Floodplains project** has identified methods to assess the value of conservation and the costs associated with flooding. These can then be used to inform understanding of the synergy and trade-off between different types of benefits and costs associated with land and water management options and the impact on different stakeholder groups.

— **The Water Framework Directive project** has examined the financial impact of changing land management to meet the policy expectations contained within the WFD. The results reveal that full implementation would have profound and widespread effects on agricultural land use, a more limited implementation would benefit from a targeting of resources at highly localised level, and the most efficient approach for WFD implementation would be to target highly polluted urban areas.

— Local government could include assessments of the impact of changing land management on water quality as part of Local Development Frameworks.

On stakeholder involvement and partnership working: Several Relu projects highlight the need for more sustained and two-way communication with stakeholders. New "knowledge bases" can be established that combine local knowledge with external expertise. The research has identified a number of techniques that enable stakeholders who may start with different views to redefine the issues collectively in a way that can, in turn, reveal innovative solutions with multiple benefits. A positive feedback loop can be seen in much of the Relu research whereby small initial changes yield a small benefit that encourages bigger change. The frequent result is the building of local capacity through levering in tangible new resources including fresh commitments of time and external funding and the supply of expertise.

— **The Testing Community Catchment Management project** has identified the benefits of combining external expertise with local stakeholder knowledge to address diffuse pollution at a catchment scale. The research results challenged previous assumptions about the source of pollution. Tools and techniques were developed that enabled complex ecological issues to be communicated and managed locally, facilitated cooperative working and encouraged coordinated action across neighbouring farms.

— Devastating environmental events like flooding can move those affected by them to dispute the knowledge claimed by experts. These controversies can expose the scientific and policy underpinning of flood risk management to the rigour of public scrutiny. **The Knowledge Controversies project** trialled and evaluated the establishment of groups of scientists working collaboratively with local residents in order to interrogate "expert" understanding of local flood risk. The group developed novel ways of modelling flood risk, informed by local knowledge and experience. This led to new options for upstream storage of flood waters that had not been previously considered.

— **The Angling project** has identified how a local touchstone issue can bring stakeholders together. For example, looking after the endangered freshwater pearl mussel on the Esk has been shown to bring other spin off benefits for salmonids and has levered in targeted incentives for local farmers, enabling them to introduce measures that will reduce sediment from fields entering the river channel.

— Research across the programme highlighted opportunities for innovative joint initiatives between farmers, water companies, local government and voluntary organisations such as rivers trusts.

— Local government could take the lead in the creation of community catchment partnerships and provide training and networking opportunities for community catchment management organisers.

What new problems face local government in relation to water?

Policy shifts and external pressures, in relation to water, will create a greater need for effective partnerships, if optimum outcomes are going to be achieved for all the organisations and stakeholders involved, within the limits of available resources. Local government bodies are best placed to enable and lead these partnerships, but new considerations will have implications for their capacity and the skill mix of their staff. In particular:

- All the factors that shape land use and water resource management are constantly changing and local government is in danger of addressing yesterday's problems.
- Land and water are finite resources that are coming under increasing pressure.
- The new powers and responsibilities that local government is expected to take on, which include a lead role in managing local flood risk, will require a reworking of relationships with the Environment Agency and other key partners such as Internal Drainage Boards and water companies.
- They also have to take into account uncertainties of climate change and adaptation.
- This is happening alongside other major policy changes such as reforms to the Common Agricultural Policy which could have implications for rural land use from 2013 onwards.
- Statutory responsibilities on water and land use tend, at present, to be distributed across several departments and specialists.
- Administrative structures, boundaries, relationships and experience that have evolved over many years have to be evaluated in the light of changing needs.
- Building and sustaining a consensus amongst diverse groups presents challenges and effective communication of complex information to non specialist audiences is central to success.
- Greater responsibilities may demand increased capacity at a time of severe financial constraint which may call for a rebalancing of resources between organisations.

How might the role of local government change in future?

Relu research should also help local government anticipate the future strategic direction of policy. As legislation such as the WFD is implemented, one likely option might be to devolve greater responsibility, and the requisite resources, to local government bodies. This could happen within the national policy framework for implementing the Directive, as mediated through River Basin Management Plans. More weight could then be given to local concerns and priorities, while retaining an appropriate level of national consistency.

In practical terms, local government could play a stronger role in:

- Coordinating, planning, and integrating, at a catchment level, the delivery of all water and land management inputs from all public sector players, voluntary organisations and businesses.
- Influencing priorities and targeting.
- Leading and managing the engagement with local interests.
- Stimulating and supporting locally-led initiatives.
- Generally 'joining-up' implementation.

In order to support this:

- Local government would need to strengthen their human and organisational capacity and technical capabilities.
- Legislative changes might also be needed to ensure that local government had sufficient authority to play a stronger role.
- Proposals to build the "Big Society" need to include roles for local government in providing local leadership to encourage people to take an active role within their communities.
- Provision will need to be made for local government bodies which are less willing to take on new powers and responsibilities.

- As local government is required to take on important new responsibilities and create new partnerships, it must play a much stronger central role in water management.
- With a lead from local government, new partnerships could be used as a basis for collaborative work on a wide range of water management issues, and could provide a firm basis for implementing and integrating all aspects of the WFD with local land use policy and delivery.

Further information

This note was written by local government consultant David Farnsworth, with contributions from land use consultant Alan Woods.
It was funded by the Local Authorities & Research Councils' Initiative (LARCI)

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More information about all these projects may be found on the Relu website at:
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