



ISSUES

ISSUES 2 ISSUES: Transferring Knowledge into Practice

**Report on the second in a
series of transdisciplinary
seminars on sustaining urban
ecosystem services.**

**ISSUES: Integrating Sciences to Sustain Urban Ecosystem Services.
Transdisciplinary Seminar Series. Supported by ESRC/NERC/EPSC
Organised by the Universities of Abertay Dundee and Middlesex.**



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ABOUT ISSUES Overview of ISSUES seminar series

Seminar	Topics
1. Integrating Sciences to Sustain Urban Ecosystem Services	<ul style="list-style-type: none"> • The role of urban water in the provision of ecosystem services • How does the 'health' of the water-body impact on service provision? • What are the implications of this on the social, environmental & economic management of urban spaces? • Is this knowledge of use to practitioners? Can it be used to inform developments in resource management & policy?
2. From the laboratory to action: science and policy-makers	<ul style="list-style-type: none"> • How can natural scientists, social scientists, economists & non-academics better collaborate to sustain ecosystem services? • Many models, approaches and indicators are already available: why aren't they being used? Bad tools or bad communication? • Case studies; where research has informed policy development e.g. SUDS (Sustainable Urban Drainage Systems) in Scotland; initiatives that encourage recycling, reuse and waste minimisation
3: Futures & uncertainties	<ul style="list-style-type: none"> • The impact of climate change and extreme environmental and socio-economic drivers on urban ecosystem services • Interactions between the natural and built environment; geomorphology, stormwater management and biodiversity • Strategies for low impact living e.g. waste management and building design • Managing urban water-bodies in the face of uncertainty
4: We have the technology; the challenge is decision-making	<ul style="list-style-type: none"> • Do we already have the technologies we need to sustain urban ecosystem services? If so what are these? • Technologies articulate and imply social relationships: what are the appropriate social relationships and what are the societal impacts of the technologies we use? • Does our approach to governance influence the development of technology? Or is it the other way round?
5: Managing the land-water duality	<ul style="list-style-type: none"> • How do alternative strategies for urban planning, waste, stormwater and ecological provision impact on human health? • Is encouraging recreation in urban areas a potential hazard to human health? • If there are any risks, how can these be managed?
6: Weighing-up the benefits	<ul style="list-style-type: none"> • Do we need new ways of 'valuing' ecosystem services? Can we do this without assigning an economic value to them? • Community engagement is increasingly a legal requirement; what happens if the community does not opt to act sustainably? • Community well-being versus societal well being: how do we manage when they don't coincide?

With a common goal of enhancing the sustainability and quality-of-life of city-living, this seminar series brings together social scientists, environmental scientists and practitioners from a range of disciplines and sectors to jointly take forward research and practice (see Table 1 for an overview).

Aims and objectives: One of the central aims of this seminar series is to develop a practitioner-led research agenda which will then form the basis of a series of full interdisciplinary research proposals aimed at meeting the challenges of sustaining future urban ecosystem services. The role of urban water ecosystems is identified as a 'common thread' which contributes to or impacts on the provision of a wide range of urban ecosystem services: flood control; drought mitigation; both the flux and fate of pollutants and their potential to impact on human health; the protection and enhancement of streams and rivers; the provision of blue-green areas for recreational and social amenity benefits; maintaining urban ecologies and detoxifying and decomposing waste materials. Founded on this general topic, the twin aims of identifying transdisciplinary research needs and knowledge transfer are clearly interwoven throughout each of the 6 seminars listed in the table above.



SUMMARY

The 'ISSUES 2 ISSUES: Transferring Knowledge into Practice' event was held at Heriot-Watt University on May 15th 2008. The event was a result of collaboration between the Universities of Heriot-Watt, Abertay Dundee and Middlesex.

This report summarises the outcomes of the event. Copies of the presentations are available on both ISSUES websites (given below).

'ISSUES' Websites:

ISSUES: Integrating Sciences to Sustain Urban Ecosystem Services. <http://issues.abertay.ac.uk/>

The ISSUES Project: ISSUES kt-sue@hw.ac.uk: <http://www.urbansustainabilityexchange.org.uk/>

BACKGROUND

Whilst attending the CityForm final dissemination event in November 2007 Keith Baker of Heriot-Watt met Lian Scholes of Middlesex University and discovered that there were two different but complementary 'ISSUES' projects – the Abertay and Middlesex 'Integrating Sciences to Sustain Urban Ecosystem Services' and the Heriot-Watt and Cambridge 'Implementing Strategies for Sustainable Urban Environment Systems'. The shared name results from a timely coincidence whereby the two projects gained funding through different research council streams. Given the complementary nature of the two projects, and that the former is designed to provide a series of seminars aimed at bridging the gaps between academia and practitioners, the two groups decided to co-host a seminar on knowledge transfer. The result was ISSUES 2 ISSUES, a successful event combining short talks and facilitated discussions that was attended by a healthy mix of around thirty five academics and practitioners. The results will feed into the work of both projects and further collaboration between the projects and the attendees is anticipated.

EVENT PROGRAMME

The event was divided into morning and afternoon sessions, each opening with an introduction and two or three short (10 min) talks to frame the discussion sessions to follow, for which the attendees were split into three facilitated groups consisting of both academics and practitioners. The speakers were asked to provide frank and provocative talks to encourage lively debate and this was indeed evident in much of their content. The discussion questions were paired to encourage the attendees to give answers from their own perspectives and to draw out common problems, opportunities for bridge-building and ideas for improving knowledge transfer that both groups would subscribe to. The programme can be found in Appendix 1. The delegate list can be found in Appendix 2.



OUTCOMES

Morning Discussion

Much of the morning's discussion focussed on how academics could improve their communication with practitioners and how best to design and target research to inform practitioners and influence policy-making more effectively.

RESEARCHER QUESTIONS:

1A. Write down one or two things that you think your research group could do differently to make it more likely that your research will reach end-user groups.

1B. Please write down one thing that your end-user audience(s) could do to make them more likely to come across and be able to make use of new research findings.

PRACTITIONER QUESTION:

1C. Please write down two or three key things that you think researchers should do to make their research more accessible / relevant to your day to day work.

Recommendations for academics

- Summarise! Academics need to summarise their research more effectively and communicate results in succinct formats (absolutely no more than 1-2 sides of A4) using language that emphasises the relevance of the work to practitioners.
- 'Bang on the door of right people'. Very few non-academics read journals and trade journals are usually only skim-read. Even if the results of a project are important they may not be picked up as such by practitioners so hammering them home to the right people is essential if they are to be used.
- Keep abreast of policy. The most valuable research projects are those that address evidence needs for current or proposed policy. Academics need to keep themselves up to date with policy making, particularly in their own fields, and direct their research to fill evidence gaps. In sustainability (as in other fields) that means developing first hand knowledge of major government publications.
- Know where policy makers take their information from. Policy-makers and others involved in governance have limited time to spend on research, and similarly the researchers they employ do not have time to digest large amounts of information. The sources they use tend to be limited to those that present information in appropriate formats. These need to be identified and targeted if the results of research are to be taken up.
- Know your opposite numbers. Identifying relevant departments or organisations is the first step, but having personal contact with the key person(s) in them is an important second step.
- Indicate what policy area is relevant to your research. When presenting the results of research it may not always be clear to which aspect of a problem it is relevant. Whilst getting it to the attention of the head of a department is obviously important it needs to be related to a specific policy or policies to direct it to the most appropriate end-users.
- Use key words for easy Googling. In practice at least, Google has become the font of all knowledge. As a result using key words in any work published online is essential to bring it up the list of results for a search. However, as in academic publications, this also applies to all effective dissemination, especially as terms such as 'sustainable development' encompass a multitude of sub-areas.



Effective collaboration

When it came to the issue of how to collaborate more effectively there was much agreement about the value of secondments. These currently tend to be through the traditional route of practitioners taking university courses but are also happening between government departments and other organisations – with periods of time being up to a couple of years. There was a general agreement that having more academics seconded to practitioners' organisations would benefit collaboration and knowledge transfer.

Dealing with Uncertainty

The discussions flagged up the problem of communicating uncertainty as a language barrier between the two groups. Those within academia tend to have a thorough and implicit understanding of uncertainty that is largely lacking in the non-academic world. Where messages can be simplified to avoid mentioning levels of uncertainty this helps get them across. Where this is not possible communicating uncertainty, and in particular its practical implications, is a necessity.

Afternoon Discussion

The afternoon session addressed more practical issues regarding how academics and practitioners could work together more effectively and drew out some clear messages for both groups.

RESEARCHER QUESTION:

2A. Write down one or two new approaches to communication and dissemination that would make it more likely that your research will reach end-user groups

PRACTITIONER QUESTION:

2B. Please write down one or two changes (in legislation, regulation, or other) that would make it more likely that you would seek out and be able to make use of new research findings.

Useful Dissemination Activities

Suggestions included:

- Rewriting findings so they are suitable for publication in Professional and Trade Journals
- Responding to consultations
- Looking up and learning from 'POST NOTES' – as an excellent example of how to summarise
- Submitting bids for Government 'Think Pieces'

Embedding / Secondments

The earlier discussion on secondments was re-visited as attendees raised some ideas specific to their own research / work areas. Options for embedding programmes of research (as well as researchers) were explored, for example within the British Geological Society and the Environment Agency. The delegate from Glasgow City Council urged researchers to work closely with potential end-users (e.g. by sitting in the same office on a regular basis) so that they have a proper understanding of practitioners' current issues.



Making better use of technology – Data-sharing and web portals

One of the bigger ideas to emerge from the afternoon was how to tackle the problem of practitioners needing easier access to academic research, and likewise researchers having easier access to information on practitioners' needs. For academics and practitioners who are engaged in collaborative research projects there was a general agreement that more could be done to share data through providing access to intranets and other internal data storage systems. Although some universities and organisations provide 'visitor' access it is not common, and existing systems could be improved. The discussion also supported previous ISSUES project research when the idea of a single web portal for academic research was raised. Attendees recognised that this would require significant investment and staffing, perhaps on the scale of a small government department, but it was pointed out that the turnover of the UK's construction industry alone would dwarf the amount of funding needed. The practitioners were keen that a single carefully indexed repository for research would be of considerable benefit to improving collaboration.

Models – Too many?

The issue of the production of models by researchers was raised. Models were seen as a useful way of applying and communicating results, but concerns were raised that their popularity means that there are now a plethora of competing models and practitioners are finding it difficult to choose between them.

Communication

The problem of how to communicate more effectively was addressed again, this time with messages common to both academics and practitioners.

- Beware of specialist jargon. Technical jargon is used as common parlance by academics and practitioners but the languages may differ even in the same field. Both groups need to be aware of this.
- Importance of project management. Improving project management was seen as a key area for improvement, particularly for multidisciplinary / collaborative projects. As working practices can differ markedly even on the same side of the researcher / practitioner divide developing strong project management practices were seen as important to successful projects.
- Maintaining relationships. Communication is a two-way process. There was general agreement that the maintenance of relationships through regular communication and interaction was an area for improvement for both groups.
- Terms of Reference: Make sure that these are clear from the outset
- Communication of Findings: The way in which messages about findings are reported should be agreed between researchers and collaborators



Closing Session

The event was ended with a session in which attendees were asked to 'vote' on which ideas generated through the day they would take away and implement. The results were as follows (approximately 20 attendees were present for this closing session):

- Identify my relevant policy person(s) - 5
- Make our webpage policy/practitioner oriented with "simple succinct statements" - 16
- Work on embedding researchers/research – 11
- Make use of professional dissemination bodies, e.g. the RIBA Science Media Centre – 3
- Re-write a journal article for trade press and/or popular press – 13

Other comments:

- Sixteen attendees backed the idea of a single web portal for research dissemination.
- An attendee from Glasgow City Council who had previously had mixed experience of working with academia offered to take the initiative of organising an event at which the council would present their research needs. This was agreed by all as a highly worthwhile outcome of the day.

CONCLUSION

This event produced a set of outcomes that will form a useful contribution to both the ISSUES seminar series and ISSUES Project. The meeting also served as a productive networking opportunity for the attendees. The co-organising teams worked well and efficiently to set up and run the event and a good working relationship was established between the universities. Although no formal feedback forms were produced comments made at the close of the event and by e-mail have been entirely positive. It was noted by several ISSUES seminar delegates that having a seminar which focussed on transdisciplinary knowledge transfer and communication near the start of the seminar series was particularly useful in terms of providing a clearer path of meeting one the overarching aims of the series – development of a transdisciplinary research group undertaking practitioner-lead research on the theme of sustaining future urban ecosystem services.



**APPENDIX 1. Programme for the Day: ISSUES 2 ISSUES:
"Transferring knowledge into practice"**

**A transdisciplinary seminar on Sustaining Urban Ecosystem Services
Cedar Suite, Heriot Watt University, Thursday May 15th 2008**

Time	Item, topic and speaker(s)
10:30	Coffee and registration
11:00	Introduction to the day: Kate Beckmann, Lian Scholes and Rebecca Wade
11:10	How can natural and social scientists, economists & non-academics collaborate to sustain ecosystem services? Introduction to session and speakers
11:15	The Policy Making perspective - Ian Bainbridge, Scot Gov't: "What do policy makers look for when developing policies relating to sustainability and ecosystems?"
11:25	Case Study Perspective: Neil Mclean with SUDS as a case study where research successfully informed policy development and "Why this worked"
11:35	Small groups for interactive discussion sessions: 'What do researchers need to do differently to meet the needs of potential end users? And what might end-users do in order to benefit from relevant research?'
12:20	Conclusion from interactive session and questions, thanks to speakers
12:40	LUNCH
13:40	Introduction to afternoon session: 'Many models and indicators are already available: why aren't they being used? The wrong tools or bad communication?'
13:45	Academics Anonymous - Structural Barriers to dissemination beyond academia and how to overcome them: Prof. Jim Harris, Cranfield University
13:55	Researcher Perspective: Louise Hurley; Sheffield University: "Decision tools, indicators, research findings: How to get your research outputs to the people who should be using them."
14:05	Practitioner viewpoint: City planning; Sandy Gillon, DRS, Glasgow: "How to get information to practitioners so that it makes sense and can be used!"
14:15	Interactive session: "Dissemination and PR approaches to improve the reach and take-up of research by end-users"
15:00	Tea and Coffee
15:30	Conclusion from interactive session and questions
15:50	Final remarks, final questions, thanks, close
16:20	DISPERSE

APPENDIX 2. ISSUES 2 ISSUES – May 15th – Delegate List

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