Communicating Sustainability Research – Challenges, Opportunities and Dissemination Strategies
• Presentation based on recent edited collection (Fahy and Rau, eds., *Methods of Sustainability Research in the Social Sciences*, London, Sage)

• [http://www.uk.sagepub.com/books/Book235581](http://www.uk.sagepub.com/books/Book235581) for further information and sample chapters 1 and 10
• Considering the position of sustainability research at the interface between academic inquiry and policy

• Overview of the Consensus Project
  – Challenges and opportunities of undertaking policy-relevant research
    – Theory and research questions
    – Choice of methodology
    – Outputs and dissemination of research

• Concluding reflections
CASE STUDY: CONSENSUS

7-year collaborative project involving TCD and NUIG  2008-2015
Examines key areas of household consumption: energy, water, food and transport.

Financed by the Irish Government and administered by the Environmental Protection Agency

No prescriptive research design

One of the key outputs of this research was to make recommendations for local and national sustainable consumption policies.

www.consensus.ie.
Other aims:

- gathering of baseline data for Ireland in the areas of transport, energy, water and food
- reviewing of key issues for sustainable consumption of measurement, evaluation, behavioural analysis, quality of life and governance
- facilitating cooperation between stakeholders involved in consumption practices

Interdisciplinary approach adopted

Mixture of conventional and innovative research methodologies, including surveys, interviews, participatory action research and visioning techniques
Designing the research questions for ConsEnSus

• How to frame Sustainable Consumption (SC)?

• One of the primary aims of the project is to explore how a shift towards more SC might be encouraged, measured and governed.

• Hence, this project reflects the traditional patterns in policy-relevant research that prioritise the issue of measurement over theory building and conceptual explorations.
• Need to balance commonly held notions of consumption as an economically necessary, but environmentally problematic, activity carried out by individual householders, with concepts that emphasised its wider social and cultural significance, its multi-scalar effects and its structural root causes.

• The danger of perpetuating, rather than challenging, established ways of thinking about, and measuring sustainability remains a critical issue for sustainability researchers and their audiences....
Convention and innovation: combining methodological approaches

- Key feature is the persistent dominance of quantitative approaches to data collection and analysis
  - Barr (2013) concerned about the potential decontextualisation of these measurements
- However, still important to recognise the significance of quantitative data for a critically inspired, progressively orientated research agenda
• Large-scale extensive survey of 1500 households on the island of Ireland
• Resulting in foundational baseline data in key areas of consumption
• Review of international good governance practice for more sustainable consumption and measuring and evaluating Ireland’s performance
• Large scale survey data + cataloguing of good practice examples = Solid Data
• Sustainability-related research questions could best be answered by looking at groups and networks rather than individuals – need appropriate methods to capture the social linkages and synergies...

• Goal of sustainability research is to promote integrated thinking and a holistic perspective

• However realities of designing projects adhere to the convention of breaking them down into discrete ‘work packages’ – small manageable sub-problems.. (sectoral ‘silos’).
Time frame of the study...

• Cross sectional designs favoured over longitudinal designs - fewer practical and financial problems!

• Topics issues under investigation - need a quick delivery of results

• Academics dilemma: rapid turnaround time...

  ...increasing university workloads:
  – Academics can often get accused of offering ‘too-complex views, too-time-consuming methods, too-contingent conclusions’ (Bell 2011:217).
• Rau and Edmondson (2013) argue that growing engagement with the topic of time among sustainability researchers has yet to be matched by more time-sensitive designs and research methods.

• Another dilemma inherent in the arguments made for policy-relevant research is that there is an assumption that the relevance (or otherwise) of the work is known from the outset of the project.
Innovative methods

• Opportunities for methodological innovation & multi – methods – key feature of sustainability research

• Offer opportunity to challenge policy makers on how research should be conducted.

Visioning and backcasting workshops
Consensus vision development

High Cultural Change - 'Community Core Heat'

- Regulation of space
- Internal modularisation: households easily add/ adjust room size to maximize efficiency of space heating
- Insulating materials in key living rooms
- Communal recreational spaces: accommodate for smaller house size & reduces overall energy consumption
- Biological district heating for tenants that cannot be retrofitted in biological core
- Biological core: fed by households with waste / algae / organisms; produces biogas for power heating
- Cold / durable clothing popular in cool weather (inside home and at work)
- Shared facilities: e.g. shared equipment in basement, low VAT for group purchasing
- Green works: voluntary eco-responsibility courses on BEC, GIY, upcycling and core maintenance
- Participants awarded eco-points for purchase of environmentally friendly products / services

High Regulation - 'Carbon Control'

- Renewable energy generation for every home
- Smart super-grid integrates multiple supply sources: home renewable power; community-owned renewable energy farms; and central energy power
- Energy Management System (EMS): online & home display screen
- Carbon quota display: allows tracking of personal carbon quotas
- Carbon quota card: swipe to use / buy carbon intensive products (e.g. heating) and services
- Compulsory attendance of energy crash course if quota is exceeded, followed by disconnection
- Home floor-plan: shows where heating/energy using appliances are off - allowing remote control
- Green credits & awards for districts with low energy consumption

Scenario 2: Tighter regulation & technology improvements

- Water quotas: limited water quotas per person
- Wet Room: all water using appliances in one room with direct piping between them to allow for cycling of water
- Wash & Restrictions if quotas are exceeded
- Green credits: awarded to individuals who stay under quota, used for eco-products & services
- District Water Competitions: win 'green pioneer' for area
- District water consumption levels publicly available
- Design standards promote efficient low-flow water faucets
- Thumb print / fingerprint activated to monitor water quota use
- Steam/wash shower: reduces overall water use

Scenario 3: Behavioural Adaptation

- Rainwater harvesting: individual / communal is only source for ACL washing seeds
- Greywater systems: allow water reuse
- Low water availability
- Medium water availability
- Short-fid shower
- Targeted bathing 8-day
- Water supply monitor: shows current & predicted water levels diagnosing appropriate washing behaviour
- Government regulation of advertising on beauty and hygiene
- Education and communication campaigns for low water consumption
Making an impact? Research outputs & dissemination of results

• EC (2006) scientific community has a duty to share its new-found knowledge with a broader public.

• Raises questions:

• Who decides what counts as acceptable evidence? Are actors in the policy making arena really willing to either radically reform existing policy if evidence is produced that these measures are either ineffective or counter-productive?
- Nature of SC research
  - Reduction in conceptual complexity in research outputs when disseminating sustainability research results
- Can result in tensions over:
  - Terminology used
  - Visual representation of results
  - Choice of media
- Time consuming
Consensus dissemination

- Examples:
- Factsheets: survey data
- Innovative dissemination
Energy Consumption

The combined impact of global household energy consumption is a major contributor to environmental pressures. Ireland’s household consumption levels have increased dramatically in the past decade. Ireland currently has higher energy usage per dwelling and higher CO2 emissions than the EU average. Comparing energy usage per dwelling, Ireland was 31% above the European Union-15 average and 30% above the European Union-27 average (SEI, 2008). These figures are expected to continue to grow over the next 25 years (OECD, 2011).

Energy reduction

- Over half of the respondents had not reduced their household energy consumption in the past month for environmental reasons (53%, n=789).
- Older respondents tended to be the most active energy reducers with 61% of the 65-79 age groups reporting that they had reduced their energy use, in comparison to 49% of the 50-64 age cohort and 43% of the 34-49 age groups.
- There was little variation noted between men and women in terms of reducing their energy use with 40% of female respondents having done so, in comparison to 44% of male respondents.
- There were only marginal variations in terms of energy reduction behaviour across the different income categories in both the Northern Ireland and the Republic of Ireland samples.

Willingness to buy energy efficient goods and services

- The majority of the respondents stated that they would be prepared to buy more energy efficient appliances (91%, n=1,365).
- Willingness to purchase energy efficient appliances was consistently high for both sexes (with 90% of men and 92% of women concurring respectively) as well as across all age cohorts.
- High levels of willingness were noted across the different income brackets with approximately 85% to 92% of respondents in the Republic of Ireland sample stating their inclination to purchase energy efficient appliances.
- Likewise, willingness to purchase energy efficient appliances was high in the Northern Ireland sample with agreement between 88% to 100% recorded across all income groupings.

Figure 7.1: Reasons provided for purchasing an energy efficient appliance

- Although reported intention to purchase energy efficient appliances was high, less than half of the respondents (40%, n=659) had actually purchased an energy efficient appliance in the past five years.
- The most common reason specified for purchasing such an appliance was ‘a mix of environmental and financial reasons’ (see Figure 7.1).
1 CONSENSUS

3 Academics
5 Researchers
7 Workpackages
100+ Key Stakeholders
650+ SCRN members & followers on twitter
2000 Citizen-consumer engagements
100,000+ Civic interactions

www.consen sus.ie
Successful Dissemination?

• Participation in policy-relevant research offers both opportunities and constraints
• Dissemination of results to targeted communities (e.g. policy makers, practitioners) may or may not affect change
• Unintended benefits of policy-relevant research (e.g. use by local networks of NGOs and campaign groups, community projects)
• Traditional academic reward systems are based on peer review, publication records and, indeed, specific objectives of individual disciplines = unique challenges of conducting that research in the distinctly interdisciplinary field that is sustainability research.

• Under appreciation of user valued research: the Research Assessment Exercise (RAE) in the UK, funding agencies following suit...

• Calls for new research agenda ...to value all activities related to developing and implementing solution strategies for solving and mitigating sustainability problems.
Concluding Reflections

• Conventional methodologies continue to shape expectations and research landscapes in the field of sustainability field.

• More integrated, innovative approaches have not entered the public’s imagination to the same extent.

• Disparities between images of social research and actual research practice impact on social-scientific sustainability research in many ways, e.g. decisions about what types of research projects do and do not receive funding.

• Need to reconsider the channels and mechanisms for supporting sustainability research and to strive for more inclusive ways of measuring the impacts of these efforts in this field.


