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Nationalities: Canadian and British

EMPLOYMENT HISTORY

School of Earth and Environment, University of Leeds:

- 2007-present Senior Lecturer in Sustainable Development (Equivalent to Associate Professor in Canada)
- 2003-2007 Lecturer in Sustainable Development (Equivalent to Assistant Professor in Canada)

Liu Institute, University of British Columbia.

- 2001-2003 Post-Doctoral Research Associate

KEY ACTIVITIES

- I am an interdisciplinary social scientist with particular interests in the human dimensions of environmental change focusing on food systems and food security.
 - I have field work experience in Belize, Canada, Thailand and the UK where I have used interviews, questionnaires, focus groups, and ecological surveys to explore land management issues.
 - I have also conducted historical analyses of food systems and environmental change in China, Romania, India, Botswana, and Malawi.
- I am involved in developing policy and have worked with a number of government departments in Canada, Thailand and the UK to turn research into policy.
- I communicate extensively with popular audiences, regularly speak with the media, and have two forthcoming mainstream books on issues relating to sustainability and food.
- I have experience teaching subject-specific courses to undergraduate (1st and 3rd year) and graduate students and have led graduate seminars on research methods involving how to collect, analyze and interpret data from human subjects. In this, I have mostly focused on qualitative research methods.

CAREER HIGHLIGHTS

- ***EDUCATION***
 - B.A. Anthropology with High Distinction (1996: University of Toronto).
 - M.Sc. Forestry (1997: University of Toronto).
 - Ph.D. Resource Management and Environmental Studies (2002: UBC).
 - See p. 3
- ***RESEARCH GRANTS:***
 - I have been the lead or co-investigator on research council grants worth a total of \$14 million (Canadian).
 - See p. 4
- ***PUBLICATIONS:***
 - I am the co-author of a mainstream popular science book dealing with the history, science, and sustainability of western diets and food production. This will be published by Harper Collins in September 2008.
 - I am working on another co-authored popular science book dealing with globalization, food and environmental change. This is being written under contract with Simon and Schuster and will be published in 2010.
 - 35 peer-reviewed journals articles and book chapters published or in review.
 - See p. 6
- ***POLICY and MEDIA:***
 - Co-author of six environmental policy briefs for senior Canadian politicians, including the Prime Minister of Canada, the Privy Council of Canada, and the Minister of the Environment.
 - Received media coverage for work in CBC, BBC Radio, BBC Television, and range of print sources including *The Times* and *Yahoo!News*.
 - See p. 12
- ***INDICATORS OF ACADEMIC ESTEEM:***
 - Since 2004, I have given invited presentations in Canada, the UK, France, Austria, Denmark, and Portugal.
 - I am a member of the “Global Environmental Change and Food Systems” advisory panel.
 - Reviewer for 11, and on editorial board of one, academic journals and have reviewed proposals for the SSHRC, two UK Research Councils, the UK’s Department for Food and Rural Affairs, and the Research Council of Norway.
 - External PhD examiner for the University of East Anglia and the Asian Institute of Technology
 - See p. 13
- ***TEACHING, SUPERVISION & ADMIN:***
 - Experience teaching: first and third year lecture-based courses; undergraduate field trips; graduate research seminars; supervised to completion 15 Masters students and 2 Ph.D. student; currently supervising 7 Ph.Ds.
 - See p. 15

PREVIOUS POSITION

Position: Post-Doctoral Research Associate
Years: 2001-2003
Department: The Liu Institute for Global Issues
Institution: University of British Columbia
Supervisors: Dr. Olav Slaymaker and Dr. Lloyd Axworthy

EDUCATION

Ph.D.: Resource Management and Environmental Studies
Years: 1998-2002
Department: Institute for Resources and Environment
Institution: University of British Columbia
Supervisor: Dr. M.P. Marchak
Thesis Title: Ecologies of Scale: socio-economic obstacles to sustainable agriculture

M.Sc.: Forestry
Years: 1996-1997
Faculty: Faculty of Forestry
Institution: University of Toronto
Supervisor: Dr. W.A. Kenney
Thesis Title: Cultural Perspectives of Urban Forestry

B.A. Hon.: Anthropology (High Distinction)
Years: 1992-1996
Faculty: Faculty of Arts and Sciences
Institution: University of Toronto

MAJOR CURRENT RESEARCH PROJECTS

£5.5 million 2008-13 Centre for Climate Change Economics and Policy

This award from the UK's Economics and Social Research Council provides core funding to host a 5-year centre dealing with the economic and policy impacts of climate change. The centre is led by Sir Nick Stern and Prof. Judith Rees from the London School of Economics and Prof. Andrew Gouldson from Leeds. Within the centre, I am leading one project, and co-leading two others, dealing with how to capture farmer decision-making processes in integrated crop-climate models and to investigate trade-offs between climate adaptation and mitigation policy with reference to farmers in different parts of the world. In total, my projects involve six years of funding for a full time PDRA and funding for one PhD student.

£1.75 million 2007-09 Global Scale Impacts of Climate Change

This award from the UK's Natural Environment Research Council has the overall aim of developing a new generation of integrated assessment models on the impacts of climate change. It is led by Prof. Nigel Arnell at the University of Reading, and includes 10 institutional partners. I am the PI for the University of Leeds, and my own work package is on characterizing regions vulnerable to drought. This work package provides for 18 months of a full time PDRA plus associated expenses.

£320K 2007-10 Rural Economy and Land Use Research Fellowship.

This award from the UK's Economics and Social Research Council includes a "teaching buy-out" that is allowing me to dedicate 3 years to research by funding Leeds University to cover all teaching and other non-research activities. The overall goal of my fellowship is to use historic data to characterise food systems vulnerable to climate change and then use these insights to project where food systems may be vulnerable in the future under different socio-economic and climatic scenarios. I am the PI of this project. In addition to covering my salary for three years, the fellowship also includes field, travel, student support, and miscellaneous expenses.

£750K 2006-2009 Sustainable Uplands Project

This award comes from a consortium of the UK's research councils under the banner of the "Rural Economy and Land Use Program". The overarching goal is to develop integrated socio-economic and biophysical models of the UK uplands to test different policy scenarios. The project is led by Dr. Klaus Hubacek (U. Leeds) and I am responsible for two work packages, one that provided the initial scoping interviews of farmers in rural environments and the other dealing with taking key lessons from the models back to farmers in order to discuss adaptation options. Overall, my work in this project has supported one post-doctoral research post for 3 years.

OTHER RESEARCH AWARDS

YEAR	AMOUNT	SOURCE	DESCRIPTION
2010-12	\$20K	IDRC ^e	Grant for Ph.D. student's fieldwork on food systems in Bangladesh (M.Khandakar).
2008-11	£90K	ESRC ^a	PhD studentship to study impacts of bioenergy plantations in Africa.
2007-11	£90K	ESRC/NERC ^b	PhD studentship on climate induced migration in Africa.
2006-10	£90K	ESRC/NERC	PhD studentship on links between ecological and socio-economic resilience in the UK.
2005-8	£90K	RELU ^c	PhD studentship on upland rural management in the UK (with F. Worrall, University of Durham)

PAST RESEARCH AWARDS

YEAR	AMOUNT	SOURCE	DESCRIPTION
2004-5	£50K	RELU	Scoping study to investigate drivers of rural land use change in the UK (PI: K. Hubachek)
2005-7	~\$12K (USD)	IFS ^d	Grant for Ph.D. student's fieldwork on livelihoods in Ghana (J. Atibila).
2004-5	~\$20K (CAD)	IDRC ^e	Grant for Ph.D. students' field work on urban agriculture in Malawi (D. Mkwambisi)
2002	~\$15K (CAD)	UBC	Grant to host workshop at the Peter Wall Institute for Advanced Studies (O. Slaymaker, P.I.).
2002-4	\$250K (CAD)	VSI ^f	Growing Green: Law, Policy and Regulatory Reform to Promote Sustainable Food Systems in Western Canada (with West Coast Environmental Law and Farm Folk City Folk)
2000-2	~\$34K (CAD)	SSHRC	Doctoral Fellowship.
1999-02	\$225K (CAD)	CIDA ^g	Community Development project to promote urban agriculture in Thailand (with the Vancouver based NGO "International Centre for Sustainable Cities" and the "Thailand Environment Institute").

^a Economics and Social Research Council

^b Natural Environment Research Council

^c Rural Economy and Landuse Programme (a joint funding initiative of a consortium of UK research councils).

^d International Fund for Science

^e International Development Research Council

^f Volunteer Services Initiative (a programme from the Federal Gov't of Canada).

^g Canadian International Development Agency

PUBLICATIONS

BOOKS

- Fraser, E.D.G.** and Rimas, A. (Anticipated Release Date Feb. 2010). *Empires of Food: How Civilization Stands and Falls on the Food Trade*. Book being written under contract with the Free Press/Simon and Schuster (US) and Random Books/Random House (UK).
- Rimas, A. and **Fraser, E.D.G.** (Confirmed North American Release Date of Sept. 30, 2008). *Beef: The Untold Story of How Milk, Meat, and Muscle Shaped the World*. William Morrow/Harper Collins (US) and Mainstream (UK).

PUBLICATIONS IN PEER REVIEWED JOURNALS

- Chapman, D., Termansen, M., Jin, N., Quinn, C., Cornell, S., **Fraser, E. D. G.** Hubacek, K., Kunin, W. and Reed, M. (Under review). "Modelling the coupled dynamics of moorland management and vegetation in the UK uplands." *Journal of Applied Ecology*. Submitted September 2008.
- Simelton, E., **Fraser, E.D.G.**, Termansen, M., Forster, P., and Dougill, A. (Resubmitted following review). "Quantifying vulnerability to drought". *Environmental Science and Policy*. Re-submitted August, 2008.
- Fraser, E.D.G.** and Stringer, L. (Under review). "Macro forces, micro crises and the collapse of agriculture: Using Romania's landuse history to explore reasons for declines in agricultural productivity." *Global Environmental Change*. Submitted May 2008.
- Mkwambisi, D., **Fraser, E.D.G.**, and Dougill, A. (Accepted pending corrections). "The impact of urban agriculture on livelihoods in Malawi: a livelihoods approach." *Journal of International Development*. Submitted July, 2007.
- Fraser, E. D. G.**, Termansen, M., Sun, M. Guan, D. Dodds, P., Feng, K., Yu, Y (In press). "Quantifying socio-economic characteristics of drought-sensitive regions: evidence from Chinese provincial agricultural data." *Comptes Rendus Geoscience*.
- Suckall, N., **Fraser E.D.G.**, Cooper, T., and Quinn T. (Available on line). "Visitor perceptions of nature in Upland England." *Journal of Environmental Management*.
- Bradford, J. and **Fraser, E.D.G.** (2008). "Local authorities, climate change and small and medium enterprises: identifying effective policy instruments to reduce energy use and carbon emissions." *Corporate Social Responsibility and Environmental Management*. 15: 156-172.
- Fraser. E.D.G.** (2007). "Antique lands: using past famines to develop a framework to assess vulnerability to climate change." *Climatic Change*. 83: 495-514.
- Holden, J., Shotbolt, L., Bonn, A., Burt, T.P., Chapman, P.J., Dougill, A.J., **Fraser, E.D.G.**, Hubacek, K., Irvine, B., Kirkby, M.J., Reed, M.S., Prell, C., Stagl, S., Stringer, L.C., Turner, A., Worrall, F. (2007) "Environmental change in moorland landscapes." *Earth-Science Reviews*. 82: 75-100

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- Fraser, E.D.G.** (2006). "Agro-ecosystem vulnerability. Using past famines to help understand adaptation to future problems in today's global agri-food system." *Journal Ecological Complexity*. 3: 328-335.
- Fraser, E. D. G.** (2006). "Crop diversification and trade liberalization: linking global trade and local management through a regional case study." *Agriculture and Human Values*. 23(3): 271-281.
- Fraser, E. D. G.** Dougill, A., Mabee, W., Reed, and M., McAlpine, P. (2006). "Bottom up and top down: analysis of participatory processes for sustainability indicator identification as a pathway to community empowerment and sustainable environmental management" *Journal of Environmental Management*. 78(2):114-127.
- Dougill, A., **Fraser, E. D. G.**, Holden, J., Hubacek, K., Prell, C., Reed, M., Stagl, S., and Stringer, L. (2006). "Learning from doing participatory rural research: Lessons from the Peak District National Park." *Journal of Agricultural Economics*. 57(2): 259-275.
- Reed, M. **Fraser, E. D. G.** Dougill, A. (2006). "An integrated methodological framework for developing and applying sustainability indicators with local communities" *Ecological Economics*. 59(4): 406-418..
- Saddler, J., McFarlane, P., **Fraser, E. D. G.**, Mabee, W. (2006) "Canadian biomass reserves for biorefining." *Applied Biochemistry and Biotechnology*. 129(1-3): 22-40.
- Stringer, L., Dougill, A., **Fraser, E. D. G.**, Hubacek, K., Prell, C., Reed, M. (2006). "Unpacking participation in the adaptive management of socio-ecological systems: a critical review." *Ecology and Society*. 11(2): 39. [online] URL: <http://www.ecologyandsociety.org/vol11/iss2/art39/>
- Fraser, E. D. G.** Mabee, W., and Figge, F. (2005) "A framework for assessing vulnerability in the food system." *Futures*. 37(6): 465-479.
- Morse, S. and **Fraser, E. D. G.** (2005). "Making 'dirty' nations look clean? The nation state and the problem of selecting and weighting indices as tools for measuring progress towards sustainability" *Geoforum*. 36(5): 625-640.
- Reed, M., **Fraser, E. D. G.** Morse, S. and Dougill, A. (2005). "Integrating methods for developing sustainability indicators to facilitate learning and action." *Ecology and Society* 10 (1): r3. [online] URL: <http://www.ecologyandsociety.org/vol10/iss1/resp3/>
- Fraser, E. D. G.** (2004). "Land tenure and sustainable agriculture: soil conservation on rented and owned fields in Southwest British Columbia." *Agriculture and Human Values*. 21(1): 73-79.
- Fraser, E. D. G.** and Mabee, W. (2004) "Researching the secure city: looking to build a preliminary framework" *Canadian Journal of Urban Research*. 13 (1 Supplement) : 89-99.
- Mabee, W. **Fraser, E. D. G.** and Slaymaker, O. (2004). "Evolving ecosystem management in the context of BC resource planning." *BC Journal of Ecosystems and Management*. 4 (1): 1-11. <http://www.forrex.org/jem/2004/vol4/no1/art5.pdf>
- Fraser, E. D. G.** (2003) "Social vulnerability and ecological fragility: building bridges between social and natural sciences using the Irish Potato Famine as a case study." *Conservation Ecology*. 7 (2): 9. [online] URL: <http://www.consecol.org/vol7/iss2/art9>.

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- Fraser, E. D. G.**, Mabee, W. and Slaymaker O. (2003) "Mutual vulnerability, mutual dependence: The reflexive relation between human society and the environment." *Global Environmental Change*. 13: 137-144.
- Pedersen, J. and **Fraser, E. D. G.** (2003). "Water wars: cooperation or conflict?" *Alternatives*. 29 (2): 34-35. (research note, not full article)
- Fraser, E. D. G.** (2002). "Urban ecology in Bangkok, Thailand: community participation and urban agriculture and forestry." *Environments*. 30 (1): 37-49.
- Fraser, E. D. G.** and Mabee, W. (2002). "Summit: vague answers to well-known problems." *Nature*. 417 (22 August, 2002): 817. (correspondence, not full article)
- Fraser, E. D. G.** and Kenney, A. (2000). "Cultural factors and landscape history affecting perceptions of the urban forest." *The Journal of Arboriculture*. 26(2): 107-113.

PEER REVIEWED BOOK SELECTIONS

- Fraser, E. D. G.** (In press). "The house is both empty and sad: vulnerability, environmental change, economic disruption and the Irish Potato Famine." In: Richard J.T. Klein, Anthony Patt, Anne de la Vega-Leinert, & Dagmar Schröter (Eds.), *Environmental Vulnerability Assessment for Policy and Decision-Making*. Earthscan: London.
- Fraser, E. D. G.** Hubacek, K., and Korytarova, K. (In press). "Food and the environment: (neo-) Malthusianism arguments and population growth". In: Phillip O'Hara (Ed.). *International Encyclopaedia of Public Policy, Governance in a Global Age*. Routledge: London and New York.
- Hubacek, Klaus, **Fraser, E. D. G.** and Thapa, S. (In press). "Land use governance" In: Phillip O'Hara (Ed.). *International Encyclopaedia of Public Policy, Governance in a Global Age*. Routledge: London and New York.
- Mkwambisi, D., **Fraser, E.D.G.**, and Dougill, A. (In press). "Urban agriculture in Malawi: a strategy to address food security?" In: Luke Mugeot (Ed.) *Agropolis: Social and Policy Dimensions of Urban Agriculture*. IDRC: Ottawa.
- Suckall, N., **Fraser, E.D.G.**, Quinn, C. (In press). "Visitor perceptions of upland environments." In: A. Bonn (Ed.) *Sustainable Management of Upland Environments*. Routledge: London.
- Arblaster, K. Reed, M. Hubacek, **Fraser, E.D.G.K.**, Potter, C., .(In press). "Scenarios for upland futures." In: A. Bonn (Ed.) *Sustainable Management of Upland Environments*. Routledge: London.
- Fraser, E.D.G.** Termansen, M., Sun, M. Guan, D. Dodds, P., Feng, K., Yu, Y (2007). "Using past climate variability to understand how food systems are resilient to future climate change" In *Sustainable Food Production and Ethics*. W. Zollitsch, C. Winckler, S. Waiblinger, and A. Haslberger (Eds.). Wageningen Academic Publishers. The Netherlands.

Fraser, E.D.G., and Hubacek, H. (2007) "International dimensions of landuse change". In Karl Steininger and Mario Cogoy (Eds.). *International Aspects of the Economics of Sustainable Development*. Edward Elgar: Camberley, UK.

CONFERENCE PAPERS

Fraser, E.D.G., Sendsimir, J., Dougill, A. and Reed, M. (2008). "Vulnerability of Food Systems: a Dynamic Modelling Approach." The Global Environmental Change and Food Systems Conference. Oxford, UK, April 2-4.

Simleton, E., **Fraser, E.D.G.**, Termansen, M. Dougill, A., Forseter, P. (2008). "Indicators of drought adaptability in China." The Global Environmental Change and Food Systems Conference. Oxford, UK, April 2-4.

Fraser, E.D.G., Termansen, M., Sun, M. Guan, D. Dodds, P., Feng, K., Yu, Y (2007). "Using past climate variability to understand how food systems are resilient to future climate change" Eursafe 2007 Conference. 15-18th September, Vienna Austria.

Hubacek, K., Prell, C., Reed, M.S., Burt, T., Chapman, P., Cornell, S., Dougill, A.J., **Fraser EDG**, Holden J, Irvine B, Jin N, Kirkby M, Kunin W, Quinn CH, Ritsema C, Jetten V, Sendzimir J, Stagl ST, Stringer LC, Taylor MJ, Termansen M, Turner A, Worrall F (2006) "Combining formalised and non-formalised methods to stimulate social learning in resource management." Formalised and Non-Formalised Methods in Resource Management: Knowledge and Learning in Participatory Processes, Workshop, 21-22 September, Osnabrück

Reed, M.S., Dougill, A.J., **Fraser, E.D.G.**, Burt, T., Chapman, P.J., Cornell, S., Holden, J., Hubacek, K., Irvine, B., Jin, N., Kirkby, M., Kunin, B., Prell, C., Quinn, C.H., Ritsema, C., Jetten, V., Sendzimir, J., Stagl, S.T., Stringer, L.C., Taylor, M., Termansen, M., Turner, A., Worrall, F. (2006) "An adaptive learning process for developing and applying sustainability indicators with local communities." Participatory Approaches in Science & Technology (PATH) Conference, 4th-7th June 2006, Edinburgh, Scotland.

Dougill, A., Reed, M., Hubacek, K., Burt, T., Chapman, P., **Fraser, E. D. G.**, Holden, J, Kirkby, M., Prell, C., Sendzimir, J., Shotbolt, L., Stagl, S., Stringer, L., Turner, A. and Worrall, F. (2005). "Managing uncertainty in dynamic socio-environmental systems: an application to UK Uplands" Scoping the Research Agenda, May, Kings Rooms, York, United Kingdom.

Hubacek K., Reed, M., Dougill, A., Burt, T., Chapman, P., **Fraser, E. D. G.**, Holden, J. Kirkby, M., Prell, C., Sendzimir, J., Shotbolt, L., Stagl, S., Stringer, L., Turner, A. and Worrall, F. (2005). "Sustainable upland management for multiple benefits," ESRC/NERC/BBSRC Rural Economy and Land Use Programme: The Challenge for Research, 19-21 January, London, United Kingdom.

Fraser, E.D.G. (2005) "Agro-ecosystem vulnerability. Using past famines to help understand adaptation to future problems in today's global agri-food system." Complexity, Science & Society Conference. September 11-14th, Liverpool, UK.

Hubacek, K., Dougill, A., **Fraser, E. D. G.**, Holden, J., Prell, C., Reed, M., Stagl, S., and Stringer, L. (2005). "Doing adaptive learning rural research: lessons from the Peak

District National Park,” Bioscience 2005 - Biodiversity Conservation and Sustainable Development in the Mountain Areas of Europe: the challenge of interdisciplinary research, September, Athens, Greece.

Hubacek, K., Dougill, A., **Fraser, E. D. G.**, Holden, J., Prell, C., Reed, M., Stagl, S., and Stringer, L. (2005). “Managing uncertainty in complex socio-environmental systems: A mediated modelling approach.” Complexity, Science & Society Conference. September 11-14th, Liverpool, UK.

Axworthy, L. Sharma, S. and **Fraser, E. D. G.** (2002). “International water security. Commission on Globalisation” State of the World Forum Annual Conference. December 4-7th, Mexico City.

Mabee, W., and **Fraser, E. D. G.** (2002). “Tools for evaluating environmental threats to human well-being.” The Environment and Security Conference. The Liu Centre for the Study of Global Issues, University of British Columbia, April 11 and 12th, Vancouver.

Axworthy, L., Bull, G., **Fraser, E. D. G.**, Mabee, W. (2001). “The concept of environmental security.” Wilton Park Conference on Environmental Security and Conflict, March 1-3rd, Wilton Park, England.

Fraser, E. D. G. (1996). "Cultural perceptions of the urban forest." Cities as Ecosystems Conference, October 7th, Toronto, Ont.

OTHER PUBLICATIONS

- Mabee, W. and **Fraser, E. D. G.** (2003). "The human face of ecosystem management." Published Proceedings for *The Adaptive Environmental Conflicts Resolution Conference*. University of British Columbia, September 25-7th, Vancouver, Canada. Translated into Spanish.
- Fraser, E. D. G.** (2003). Book review of *Environmental Security*, (Simon Dalby, Minneapolis: University of Minnesota Press, 2002) and *Conserving the Peace: Resources, Livelihoods and Security*, (Richard Matthew, Mark Halle and Jason Switzer, Winnipeg: International Institute for Sustainable Development, 2002) in the Human Security Bulletin, Vol 1. No. 4.
- Fraser, E. D. G.** and Mabee, W. (2002) *The Environment and Security: Placing the Environmental Agenda in the Realm of Foreign Policy*. Edited Conference Report. The Liu Institute for Global Issues. University of British Columbia, Vancouver, Canada. April 10th and 11th, 2002, 63 pages.
- Mabee, W., and **Fraser, E. D. G.** (2002). "Tools for evaluating environmental threats to human well-being." Published in Proceedings for *The Environment and Security Conference*. The Liu Centre for the Study of Global Issues, University of British Columbia, Vancouver. pp. 41-48.
- Mabee, W. and **Fraser, E. D. G.** (2002). "Tools for analysis of environmental impact." Proceedings from *Circumpolar Arctic Consultation*. Department of Foreign Affairs. April 10th, Vancouver, Canada. pp. 29.
- Fraser, E. D. G.** and Timmer, V. (2001). "Returning to planet earth: the development of the environmental movement as a religious movement." Paper presented and abstract published for *Imagining Home: Exploring Culture, Language, Nation*. University of British Columbia, Feb. 2nd, 2001.
- Fraser, E. D. G.** (1999). "Governing Canada in the 2000s" essay published in *As Prime Minister I Would...* Toronto: Magna for Canada.
- Fraser, E. D. G.** (1996). "Ways of viewing the environment." *Forest Forum (special issue #10, "Urban Forests")*, Canadian Forestry Association. Pp. 65-6.

POLICY BRIEFS

Tompkins, E., **Fraser, E.D.G.**, Stringer, L., Beharry, N., Quinn, C., Termansen, M., and Challinor, A. (2008). "Response from the University of Leeds to Request for Written Evidence by the Royal Commission on Environmental Pollution report on Adaptation to Climate Change." Submitted to House of Lords, September 2008.

Fraser, E.D.G., Mkwambisi, D., and Suckall, N. (2008). "Climate induced human migration: a research framework" In *Migration and the Environment*. Working paper commissioned by Munich Re, the Rockefeller Foundation, and UNEP. Pages 75-86. Available on the World Wide Web at http://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/events/docs/programme_positionpapers.pdf

Fraser, J. and **Fraser, E. D. G.** (2003). *Brief on lifting the off-shore oil and gas Moratorium on the West Coast of Canada*. Commissioned by the Office of the Minister of the Environment, Government of Canada.

Fraser, E. D. G. and Fraser, J. (2003). *The shape of the Kyoto ratification debate*. Commissioned by the Office of the Minister of the Environment, Government of Canada.

Dowlatabadi, H., Boyd, D., Boyle, M., Elias, A., **Fraser, E. D. G.**, Harkin, Z., Mabee, W., Kandlikar, M., MacDonald, J., Mazzi, E., Pacheco, R., Rivers, N., Roberts, K., Robinson, J., Shepherd, P. (2003). *A sustainable climate policy*. Liu Institute Policy Brief on Kyoto Ratification. Submitted to the Government of Canada by Dr. Lloyd Axworthy.

Fraser, E. D. G. and Mabee, W. (2002). *Policy recommendations towards the ratification of the Kyoto protocol: The Canadian Arctic as a case study*. Commissioned by the Privy Council, Government of Canada.

Fraser, E. D. G. and Mabee, W. (2002). *Recommendations for the World Summit on Sustainable Development*. The Liu Centre for the Study of Global Issues, University of British Columbia, Vancouver.

Fraser, E. D. G. (2001). *An Environmental security approach to the international environmental governance dialogue*. Commissioned by Environment Canada and submitted to Minister of the Environment.

MEDIA COVERAGE

- Print media articles covering my work have appeared in a range of sources including *The Times* Newspaper and an article that was published in a wide range of sources after it was distributed through the "Agence France-Presse" (AFP)
- I have been consulted on the development of a BBC Radio 4 documentary on global food security and climate change (To be aired in the summer of 2008).
- I appeared on BBC television's *News at 6*, talking about local food production.
- I have been interviewed by the Canadian Broadcast Corporation on the Global Food Crisis.

INDICATORS OF ACADEMIC ESTEEM

- I am involved with the International Human Dimensions of Global Environmental Change (IHDP) Global Land Project (GLP) and the Global Environmental Change and Food Systems Programme (GECFS).
 - I sit on an advisory panel for GECFS and was part of the organizing committee for the 2008 Oxford Conference.
 - I am leading one of three workblocks for the shortlisted (grant application under review) EU network proposal submitted by the GLP.
- I am on the editorial board for the *African Journal of Ecology* and in the past three years, I have provided reviews for manuscripts for: *Global Environmental Change*, *Current Anthropology*, *Ecological Economics*, *Security Dialogues*, *Journal of Environmental Management*, *Journal of Trans-disciplinary Studies*, *Journal of European Environmental Management*, *Journal of Integrated Assessment*, *Journal of Regional Environmental Change*, *Journal of Land Economics*, and *Science, Technology, and the Environment*.
- I have reviewed grant applications for Canada's SSHRC, the UK's Economics and Social Research Council, the UK's Department for Food and Rural Affairs, the Research Council of Norway, and the UK's the Engineering and Physical Sciences Research Council.
- I have been an PhD external examiner for the University of East Anglia and the Asian Institute of Technology (Thailand).

INVITED PRESENTATIONS

* *host paid expenses for travel etc.*

- Fraser, E.D.G.** and Simelton, E. (2008). "Climate-Crop Impact Assessments: where are the farmers?" Invited presentation to the NERC Earth Systems Summer School. September 2nd, University of Bristol, Bristol, UK.*
- Fraser, E.D.G.** (2008). "Crop-Climate Impact Models: Where are the Farmers?" Invited Research Seminar at French Research Institute, Cemegref. July 30th, Montpellier, France.
- Fraser, E.D.G.** and Simelton, E. (2008). "Food systems vulnerability: linking global models with local case studies with preliminary results from China." World University Network Seminar on Contemporary China. February 7th. Recorded at the University of Leeds and broadcast to numerous institutions around the world.
- Fraser, E.D.G.** (2007). "Vulnerability of rural economies and land use systems to climate change." Workshop on Climate Change and Wellbeing. University of Sheffield. November 25th.*
- Fraser, E.D. G.** (2007). "Quantifying adaptation to extreme environmental events." French Academy of Sciences Colloquium on Adapting to Extreme Weather Events. 2-5th July, Paris, France.*

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- Fraser, E.D. G.** (2007). "Identifying Indicators of Adaptive Capacity in Different Land Use Systems." Invited Research Presentation to the International Institute for Applied Systems Analysis, 17th September, Vienna, Austria.
- Fraser, E.D. G.** (2007). "Globalization and land use change: Are there common trends, are there common implications?" Global Land Project, University of Copenhagen, 25th October, Copenhagen, Denmark.*
- Fraser, E.D.G.** and Dougill, A. (2006) "Social vulnerability to environmental change" Invited presentation to the NERC Earth Systems Summer School. September 9th, University of Bristol, Bristol, UK.*
- Fraser, E.D.G.** (2006) "Trying to understand vulnerability to environmental change using historic case studies." Invited presentation to the Global Environmental Change and Food Systems Meeting, May 17th. Oxford, UK.*
- Fraser, E.D.G.** (2005) "Climate variability, human adaptability, and famine." Research Seminar to School of Environmental Studies, University of Queens, November 25th. Kingston, Ontario, Canada.*
- Fraser, E. D. G.** (2005). "Participatory involvement in developing sustainability indicators." Expert presentation given at "Aquastress Work Block II Workshop. June 16th, Porto, Portugal.*
- Fraser, E. D. G.** (2005). "Are food systems secure? A series of historic case studies." Centre for Regional and Urban Ecology, University of Manchester, External seminar series. May 11th, Manchester, United Kingdom.*
- Fraser, E. D. G.** (2003). "Adaptive cycles and food security in history: the case of the Irish Potato Famine." Peter Wall Institute for Advanced Studies Workshop: Mutual Dependence, Mutual Vulnerability. April 26th, 27th, Vancouver, B.C.
- Fraser, E. D. G.,** Jamieson, J. and Luymes, D. (2003) "Agriculture, the environment and human society." University of British Columbia Agroecology Forum. April 4th, 2003. Harrison, B.C.*
- Slaymaker, O., **Fraser, E. D. G.,** and Mabee, W. (2003). "Mutual vulnerability, mutual dependence: ways of understanding how human society and the environment interact." Lunchtime Lecture. Peter Wall Institute for Advanced Studies, UBC. February 13th, Vancouver, B.C.
- Fraser, E. D. G.** (2002). "Agriculture, food security and climate change." North American Youth Science Leadership Institute. July 25th, Lewisburg, West Virginia.*
- Fraser, E. D. G.** (2002). "Urban forestry and agriculture in Canada." Thailand's Local Agenda 21 Task Force, March 7th, Bangkok, Thailand.*
- Fraser, E. D. G.** (2000). "Community participation and urban greenspace: organization and participation." Presentation at Greener Bangkok; a partnership approach, May 24th, Bangkok, Thailand.*

TEACHING, SUPERVISION & ADMINISTRATION

Note: As of September 2007 I began a 3 year research fellowship, which has effectively covered 100% of my teaching load.

Main teaching responsibilities during academic year

ENVI 5281	Introduction to sustainability	(50 students)
ENVI 3420	Sustainable dev. challenges and practice	(85 students)
ENVI 5020	M.Sc. research project	(45 students)

PhD Research Methods:

I have also co-run an 11 week PhD methods seminar series where I was responsible for the sessions dealing with “obtaining data from human subjects”. In these sessions we dealt with ethical issues, sampling, the merits of qualitative versus quantitative data, survey / interview design, qualitative data analysis, data aggregation, and interpretation and display.

Other teaching responsibilities that I did most years

ENVI 1110	Environment and society	(4 lectures)
ENVI 1330	Decision making field trip	(3 day field trip)
ENVI 2370	Poverty and development	(2 lectures)
ENVI 2131	Climate change social issues	(1 lecture)
ENVI 2025	Environmental skills	(2 lectures)
ENVI 5100	Research methods	(1 lecture)

Other teaching responsibilities that I only did in some years

2002-5	Critical issues in sustainable development (11 week seminar series)
2005	Urban sustainability field trip (7 day field 2 nd year field trip to Dublin)

Undergraduate research supervision

- Supervision of 10 final year research projects each year.

Masters level research supervision

- As coordinator for the M.Sc. program in Environment and Development, each year I supervised 5-7 masters level students.

Administrative Roles

Programme Coordinator for M.Sc. in Environment and Development

- Key responsibilities include managing admissions, helping students pick elective courses, and supervising students in finding/developing dissertation topics.

School Staff-Student Committee

- Key responsibilities include meeting every term with student representatives ensure appropriate feedback between student concerns and academic staff.

School Exams/Marks Committee

- Key responsibilities include ensuring examination questions are at an appropriate level and double checking final marks to guarantee school-wide standards are being maintained.

School Teaching and Learning Committee

- Key responsibilities include approving all proposed changes to course content and assessments.

PH.D. STUDENTS (NOTE: all PhD students at the University of Leeds are co-supervised)

<i>Name</i>	<i>Years</i>	<i>Title of thesis</i>
Mark Reed	2003-2005	Participatory environmental management in the Kalahari (successfully finished). Funded by the GEF.(With A. Dougill)
David Mkwambisi	2003-2008	Urban agriculture in Malawi: a win-win approach (successfully finished). Funded by the IDRC. (With A. Dougill)
John Atibila	2004-	Livelihoods and social resilience in the Volta River Basin. Funded by the Ford Foundation. (With A. Dougill)
David Abson	2006-	The link between biodiversity and food system resilience. Funded through an interdisciplinary research fellowship. (With A. Dougill)
Gareth Clay	2006-	The effect of burning on peatland ecology and sustainable upland policy Funded through an interdisciplinary research fellowship. (with F. Worall, U. Durham).
Natalie Suckall	2007-	The effect of climate change on migration. Funded through an interdisciplinary research fellowship. (With P. Forster)
Munin Khandikar	2007-	The vulnerability of Bangladeshi food systems to climate change. Funded through the Common Wealth Scholarship Programme. (With M. Termensen)
Oliver Handscomb	2008-	The effect of local versus global food systems: an investigation of tradeoffs. Funded through the University of Leeds Research Scholarship. (With W. Young)
Jen Dyer	2008-	The effect of bio-energy plantations in Africa. Funded by the Economics and Social Research Council with support from industrial partner (With L. Stinger and A. Dougill).
PhD Committees	On-going	I also sit on a further four PhD research committees.