

**University of Cambridge**  
**Department of Geography**

**Paper 3: Political Ecology in the Global South 2018-19**

**Course Outline, Reading List and Supervision Questions**

***Background to set the course into context for colleagues at other institutions:***

This course is taken by 40-50 final year undergraduates each year. It involves about 20 hours of formal contact (through lectures and small group 'supervisions'). In addition, about 60-80 hours of directed learning (reading and essay writing) is expected. It is examined through an unseen exam paper at the end of the year.

**Course Coordinator:** Dr Liz Watson (MT) Prof Bhaskar Vira (LT, ET)

**Contributors:** Dr Maan Barua (MaBa); Dr Chris Sandbrook (CS); Dr Ivan Scales (IS); Dr Bhaskar Vira (BV); Dr Liz Watson (EEW)

**Overview**

Who gets to use natural resources, and who is excluded? How do ideas about the environment influence ecologies, and how do ecologies influence ideas and power relations? Taking various political ecology approaches, this paper introduces students to a series of case studies that illustrate the ways in which people-environment relations are connected to social, economic and political processes at different scales, and to power and political contestations and struggles. Although political ecology approaches are equally applicable to urban and rural environments, the focus in 2017-18 is predominantly on rural landscapes. In addition, although political ecology explores the connections between scales and between north and south, the empirical case studies mainly focus on the impact and emergence of processes in the global south. The course emphasizes the importance of understanding different environments as both 'social' and 'natural', as well as variable over time and space. It explores the nature of environmental science, technologies, knowledge, discourse and narratives and their role in shaping environmental practices and environmental policies and their outcomes.

**Lectures**

**Part I: An Introduction to Political Ecology in the Global South**

1. Environments, knowledge, power (EEW)

**Part II: The Political Ecology of Agriculture**

2. Introducing debates over agriculture in sub-Saharan Africa (IRS)
3. A brief history of agricultural development in sub-Saharan Africa: from colonialism to global finance and a New Green Revolution (IRS)
4. Understanding the drivers of rural livelihood decisions (IRS)
5. The emerging political ecology of agriculture. Recent processes, emerging trends, important questions (IRS)

**Part III: The Political Ecology of Livestock**

6. Competing claims and livestock herders: poverty, degradation, equilibrium (EEW)
7. Competing claims: climate and conflict (EEW)
8. Competing visions: old and new policy directions (EEW)

#### **Part IV: The Political Ecology of Forests**

9. The political ecology of forest and landscape restoration (BV)
10. The political ecology of forests and water (BV)
11. The political ecology of forests and food (BV)

#### **Part V: Political ecology of Conservation**

12. The political ecology of neoliberal conservation (CS)
13. The political ecology of ecotourism (CS)
14. The political ecology of biodiversity offsetting (CS)
15. Conservation and the more-than-human (MaBa)
16. Lively capital (MaBA)

#### **Part VI: Conclusion**

Concluding discussion

#### **General readings for course (\*=highly recommended, \*\* very highly recommended)**

- Adams, W.M. (2004) *Against Extinction: the story of conservation*. London, Earthscan.
- Barua, M. (2014) Bio-geo-graphy: landscape, dwelling, and the political ecology of human-elephant relations. *Environment and Planning D: Society and Space*, 32(5): 915-934.
- \*Bryant, R. ed. (2015). *The International Handbook of Political Ecology*. Cheltenham, Edward Elgar
- Büscher, B., Fletcher, R., Brockington, D., Sandbrook, C., Adams, W.M., Campbell, L., Corson, C., Dressler, W., Duffy, R., Gray, N., Holmes, G., Kelly, A., Lunstrum, E., Ramutsindela, M. and Shanker, K., (2016). Half-Earth or Whole Earth? Radical ideas for conservation, and their implications. *Oryx*: 1-4.
- Geoforum* Volume 39, Issue 2, Pages 687-772 (2008) Themed Issue: The Time and Place for Political Ecology: The Life Work of Piers Blaikie
- Goldman, M.J., Nadasdy, P. and Turner, M.D. (2011) *Knowing Nature: Conversations at the intersection of political ecology and science studies*. University of Chicago Press, Chicago.
- Holmes, G., Sandbrook, C. and Fisher, J.A., (2017) Understanding conservationists' perspectives on the new-conservation debate. *Conservation Biology* 31: 353-363.
- Lau, J. D., & Scales, I. R. (2016). Identity, subjectivity and natural resource use: How ethnicity, gender and class intersect to influence mangrove oyster harvesting in the Gambia. *Geoforum*, 69, 136-146.
- \*Leach, M., and Mearns, R., eds., (1996). *The Lie of the Land: Challenging Received Wisdom on the African Environment*. Oxford: James Currey.
- Lorimer, J. (2015) *Wildlife in the Anthropocene: conservation after nature*. University of Minnesota Press.
- Mosley, J., and Watson, E. E. (2016). Frontier transformations: development visions, spaces and processes in Northern Kenya and Southern Ethiopia. *Journal of Eastern African Studies*, 10(3), 452-475.
- Neumann, R.P. (2005) *Making Political Ecology*. Hodder Arnold, London.
- Nustad, K. (2015) *Creating Africas: struggles over nature, conservation and land*. Hurst and Company, London

- Peet, R., and Watts, M., eds., (2004). *Liberation Ecologies: Environment, Development, Social Movements*, 2nd edition. London: Routledge
- Peet, R., Robbins, P. and Watts, M. eds (2011) *Global Political Ecology*. Routledge, London
- \*Perreault, T. Bridge, G. and McCarthy, J. eds. (2015) *The Routledge handbook of political ecology*. Abingdon, Routledge
- \*\*Robbins, P., (2012) *Political Ecology: A Critical Introduction*, 2nd edition. Chichester: Wiley
- Schulz, K.A., 2017. Decolonizing political ecology: ontology, technology and 'critical' enchantment. *Journal of Political Ecology*, 24(1), pp.125-143.
- Stott, P., and S. Sullivan (eds) (2000) *Political Ecology: Science, myth and power*. Arnold, London.
- Sundberg, J., 2016. Feminist political ecology. *International Encyclopedia of Geography: People, the Earth, Environment and Technology: People, the Earth, Environment and Technology*, pp.1-12.
- Vira, B., Wildburger, C. and Mansourian, S., (2015) *Forests and Food Addressing Hunger and Nutrition Across Sustainable Landscapes*, Open Book Publishers.
- Zimmerer, K.S. and Bassett, T. (2003) *Political Ecology: An integrative approach to geography and environment-development studies*. The Guilford Press, New York.

This course booklet includes reading that relates to the lectures and supervisions. You are not expected to read all the sources listed here, but to use them selectively to develop your breadth and depth of knowledge of the issues on the course. Individual lecturers may provide more direction and additional references as the year unfolds.

We also encourage you to explore other sources of information on political ecology as an approach or a movement. On youtube, lectures on political ecology are available, as well as interviews with political ecologists. The ENTITLE blog 'a collaborative writing project on political ecology' (<https://entitleblog.org>) contains a range of different ideas and perspectives on political ecology from different contexts. The 'Pollen Political Ecology Network' also contains a range of resources on different issues that may be of interest (see for example their blog <https://politicalecologynetwork.wordpress.com/category/pollen-blog/> or keynote lectures from their recent conference, available on youtube, eg: <https://www.youtube.com/watch?v=Qq0HI6E44YA&feature=youtu.be> <https://www.youtube.com/watch?v=RAyRVvU89BY&t=45s> <https://www.youtube.com/watch?v=4ao4vhGdMUo&t=18s> <https://www.youtube.com/watch?v=qhjYeKIBGUK>)

# LECTURES

## Part I: An Introduction to Political Ecology in the Global South

### 1. Environments, knowledge, power (EEW)

Discourses surrounding resource use in the Global South are dominated by 'apolitical' explanations of human-environment interactions. These focus narrowly on population growth, resource scarcity or resource abundance as the 'causes' of both environmental change and conflict. This lecture provides an introduction to political ecology as an alternative to simplistic narratives of human-environment interactions. Tracing political ecology's roots in Marxian political economy and moving through various theoretical 'waves', it introduces the different ways in which political ecologists have sought to theorise and analyse how power is exercised in struggles over natural resources. It also explores new directions political ecology that are emerging.

#### Reading

- \*Adger, W.N. Benjaminsen, T.A., Brown K., Svarstad, H. 2001. Advancing a Political Ecology of Global Environmental Discourses 32: 681-715.
- Anderson D 1984 Depression, dust bowl, demography, and drought: The colonial state and soil conservation in East Africa during the 1930s *African Affairs* 321-343.
- Barua, M., (2014). Bio-geo-graphy: landscape, dwelling, and the political ecology of human-elephant relations. *Environment and Planning D: Society and Space*, 32(5), pp.915-934.
- \*\*Blaikie, P. (1985) *The Political Economy of Soil Erosion in Developing Countries*. Longman, London
- \*\*Blaikie, P. and Brookfield, H. (1987) *Land Degradation and Society*. Methuen London
- Castree, N. (2015). Capitalism and the Marxist critique of political ecology. In T. Perreault, G. Bridge & J. McCarthy (Eds.), *The Routledge Handbook of Political Ecology* (pp. 279-292). Routledge, London
- Castree, N. (2005) *Nature*. Routledge, London
- Cronon, W. (1996) The trouble with wilderness or, getting back to the wrong nature. *Environmental History* 1, 7-28
- Dryzek, J.S. (1997). *The Politics of the Earth: Environmental Discourses*. Oxford University Press, Oxford.
- Elmhirst, Rebecca. 2011a. "Introducing New Feminist Political Ecologies." *Geoforum*, 42(2): 129–132.
- \*Fairhead, J. & Leach, M. (1996) *Misreading the African Landscape: Society and ecology in a forest-savanna mosaic*. Cambridge University Press, Cambridge
- Fairhead, J. & Leach, M. (1998) *Reframing Deforestation: Global analysis and local realities: studies in West Africa*. Routledge, London
- \*\*Leach, M. and Mearns, R. eds (1996) *The Lie of the Land: Challenging received wisdom on the African Environment*. James Currey, Oxford
- Fairhead, J. & Leach, M. (2003) *Science, Society and Power: Environmental Knowledge and Policy in West Africa and the Caribbean*. Cambridge University Press
- Forsyth, T. (2008) Political ecology and the epistemology of social justice. *Geoforum*, 39, 756-764
- Hinchliffe, S. (2007) *Geographies of Nature: Societies, Environments, Ecologies*. Sage, London
- Gray, L.C. and Moseley, W.G. (2005) A geographical perspective on poverty-environment interactions. *The Geographical Journal*, 171, 9-23
- Jackson, M., 2014. Composing postcolonial geographies: Postconstructivism, ecology and overcoming ontologies of critique. *Singapore Journal of Tropical Geography*, 35(1), pp.72-87.

- Judkins, G., Smith, M. and Keys, E. (2008) Determinism within human-environment research and the rediscovery of environmental causation. *Geographical Journal*, 174, 17-29
- Mann, G. (2009) Should political ecology be Marxist? A case for Gramsci's historical materialism. *Geoforum*, 40, 335-344
- Proctor, J.D. (1998) The social construction of nature: Relativist accusations, pragmatist and critical realist responses. *Annals of the Association of American Geographers*, 88, 352-376
- Radcliffe, S. A., Watson, E. E., Simmons, I., Fernandez-Armesto, F. and Sluyter, A. (2010) 'Environmental thinking and/in geography'. *Progress in Human Geography*, 34, 98-116
- Rangan, H. and Kull, C. (2009) What makes ecology 'political'? rethinking 'scale' in political ecology. *Progress in Human Geography* 33, pp. 28–45.
- Rocheleau, D. (2008) Political ecology in the key of policy: from chains of explanation to webs of relation. *Geoforum* 39, pp. 716–727.
- Rocheleau, D., Thomas-Slayter, B. and Wangari, E., (2013) *Feminist political ecology: Global issues and local experience*. Routledge, London.
- Robbins, P. and Monroe Bishop, K. (2008) There and back again: Epiphany, disillusionment, and rediscovery in political ecology. *Geoforum*, 39, 747-755
- Sandbrook, C., Adams, W.M. and Monteferri, B., (2015). Digital games and biodiversity conservation. *Conservation Letters*, 8(2), pp.118-124.
- Schulz, K.A., 2017. Decolonizing political ecology: ontology, technology and 'critical' enchantment. *Journal of Political Ecology*, 24(1), pp.125-143.
- Shrader-Frechette, K. (1996) Throwing out the bathwater of positivism, keeping the baby of objectivity: relativism and advocacy in conservation biology. *Conservation Biology*, 10, 912-914
- \*\*Sullivan, S. (2000) Getting the science right, or introducing science in the first place? Pages 15-44 in P. Stott, and S. Sullivan, editors. *Political Ecology: Science, myth and power*. Arnold, London
- Sundberg, Juanita. 2004. "Identities-in-the-Making: Conservation, Gender, and Race in the Maya Biosphere Reserve, Guatemala." *Gender, Place & Culture*, 11(1): 44–66.
- Sundberg, J., 2016. Feminist political ecology. *International Encyclopedia of Geography: People, the Earth, Environment and Technology: People, the Earth, Environment and Technology*, pp.1-12.
- Turner, M.D., 2016. Political ecology II Engagements with ecology. *Progress in Human Geography*, 40(3), pp.413-421.
- \*Walker, P.A., 2005. Political ecology: where is the ecology. *Progress in Human Geography*, 29(1), pp.73-82.
- Watts, M. (1983) *Silent Violence: Food, famine and peasantry in northern Nigeria*. University of California Press, Berkeley
- \*\*Watts, N. and Scales, I.R. (2015) 'Seeds, agricultural systems and socio-natures: Towards an actor-network theory informed political ecology of agriculture' *Geography Compass*, 9, 225-236.
- Vayda, A.P. & Walters, B.B. (1999) Against political ecology. *Human Ecology*, 27, 167-179

*Questions to think about: How have political ecologists theorised power? How has this changed over time? Where is the ecology in political ecology? What are 'environmental narratives' and what role have they played in contests over natural resources? Who's 'canon' defines political ecology? Who features in this 'canon'?*

## Part II: The Political Ecology of Agriculture

### 2. Introducing debates over agriculture in sub-Saharan Africa (IRS)

The global food crisis in 2008 (which led to riots in Burkina Faso, Cameroon, Ivory Coast, Egypt, Ethiopia, Mozambique, Senegal and Somalia and at least 16 other nations) brought the issue of agriculture firmly back onto the global policy agenda. It has led to a revival of fears about the ability of agriculture in the Global South to meet increasing demand for food, especially in the context of climate change, as well as renewed calls for efforts to 'modernize' production and questions about the ability of smallholders to meet growing demands. In this lecture we will unpack the various narratives and policies surrounding agriculture and explore the theories, models and values that underpin them.

#### Reading (\*\* = highly recommended)

- Blaikie, P. (1985) *The Political Economy of Soil Erosion in Developing Countries*. Longman, London
- Blaikie, P. and Brookfield, H. (1987) *Land Degradation and Society*. Methuen London
- Campos, M. T., and D. Nepstad (2006) 'Smallholders, the Amazon's new conservationists'. *Conservation Biology*, 20, 1553-1556
- Borlaug, N. (2000) Ending world hunger: The promise of biotechnology and the threat of antiscience zealotry. *Plant Physiology* 124: 487-490
- \*\*Collier, P. and Durcon, S. (2014) African Agriculture in 50 Years: Smallholders in a Rapidly Changing World? *World Development* 63, 92-101
- Ellis, F. (1988) *Peasant Economics: Farm households and agrarian development*. Cambridge University Press, Cambridge CHAPTER 3
- FAO (2008) *The State of Food Insecurity in the World 2008*. Food and Agriculture Organisation of the United Nations, Rome
- \*\*Foresight (2011) *The Future of Farming: Final Project Report*. The Government Office for Science, London.
- Godfray, H. C. J., Beddington, J. R., Crute, I. R., Haddad, L., Lawrence, D., Muir, J., Pretty, J., Robinson, S., Thomas, S. M. and Toulmin, C. (2010) Food security: the challenge of feeding 9 billion people. *Science*, 327, 812-818
- Gray, L.C. (2005) What kind of intensification? Agricultural practice, soil fertility and socio-economic differentiation in rural Burkina Faso. *The Geographical Journal*, 171, 70-82
- \*\*Handy, J. (2009) 'Almost idiotic wretchedness': A long history of blaming peasants. *The Journal of Peasant Studies*, 36, 325-344
- Homewood, K. M. ed. (2005) *Rural Resources and Local Livelihoods in Africa*.
- \*\*Lipton, M. (2007) Plant breeding and poverty: can transgenic seeds replicate the 'Green Revolution' as a source of gains for the poor? *The Journal of Development Studies* 43, pp. 31-62.
- \*\*Mortimore, M. (1998) *Roots in the African Dust: Sustaining the drylands*. Cambridge University Press, Cambridge
- Mortimore, M. & Adams, W.M. (1999) *Working the Sahel: Environment and society in northern Nigeria*. Routledge, London
- \*\*Netting, R.M. (1993) *Smallholders, Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture*. Stanford University Press, Stanford
- Nygren, A. (2000) Development discourses and peasant-forest relations: natural resource utilization as social process. *Development and Change*, 3, 11-34
- Oxfam (2011) *Growing a Better Future: Food justice in a resource-constrained world*. Oxford: Oxfam International
- \*\*Rockefeller (2006) *Africa's Turn: A New Green Revolution for the 21st Century*. Rockefeller Foundation, New York

- Rosset, P., Patel, R. & M. Courville (eds) (2006) *Promised Land: Competing Visions of Agrarian Reform*. Institute for Food and Development Policy, New York
- Scoones, I. and Thompson, J. (2011) The politics of seeds in Africa's green revolution. *IDS Bulletin* 42, pp. 1–23.
- \*\*Shiva, V. (1992) *The violence of green revolution: third world agriculture, ecology and politics*. New Delhi: Zed Press.
- Swift, J. (1996) Desertification: Narratives, winners and losers. Pages 73-90 in M. Leach, and R. Mearns, editors. *The Lie of the Land*. James Currey, Oxford
- \*\*Tiffen, M., M. Mortimore, and F. Gichuki (1994) *More People, Less Erosion: Environmental recovery in Kenya*. Wiley, Chichester
- \*\*Tiffen, M. and Mortimore, M. (1994) Malthus controverted: The role of capital and technology in growth and environment recovery in Kenya. *World Development*, 22, 997-1010
- Watts, N. and Scales, I.R. (2015) 'Seeds, agricultural systems and socio-natures: Towards an actor-network theory informed political ecology of agriculture' *Geography Compass*, 9, 225-236
- \*\*World Bank (2008) *The Agenda for Agriculture-Based Countries of Sub-Saharan Africa*. The World Bank, Washington

*Questions to think about: What are the dominant narratives currently surrounding agriculture in the Global South? What are the ideas, theories and ideologies that underpin these narratives? What are the counter-narratives?*

### **3. A brief history of agricultural development in sub-Saharan Africa: from colonialism to global finance and a New Green Revolution (IRS)**

In this lecture we will look at the history of attempts to change agriculture in sub-Saharan Africa, from colonialism, through the 'developmentisation' of agriculture, to structural adjustment and the neoliberalisation and financialisation of food. We will pay close attention to narratives of a 'New Green Revolution for Africa'. We will look at how radical shifts in the political economy of agriculture have affected different individuals and groups, drawing on the concept of food regimes.

#### **Reading**

- \*\*Bernstein, H. (1990) Agricultural 'modernisation' and the era of structural adjustment: Observations on sub-Saharan Africa. *The Journal of Peasant Studies*, 18, 3-35
- \*\*Bernstein, H. (2010) *Class dynamics of agrarian change*. Kumarian Press, Halifax MA
- Boserup, E. (1965) *The Conditions of Agricultural Growth: The economics of agrarian change under population pressure*. Aldine, Chicago
- Borras, S. and Franco, J. (2012) Global land grabbing and trajectories of agrarian change: A preliminary analysis. *Journal of Agrarian Change* 12: 34-59
- Davis, M. (2001) *Late Victorian Holocausts: El Nino Famines and the Making of the Third World*. Verso, London.
- Firmin-Sellers, K., and Sellers, P. (1999) Expected Failures and Unexpected Successes of Land Titling in Africa. *World Development* 27(7): 1115-1128
- \*\*Friedmann, H. (1987) International regimes of food production and agriculture since 1870. Pp 258-276 in *Peasants and peasant societies* (ed T. Shanin). Basil Blackwell, Oxford
- \*\*Friedmann, H. (1993) The political economy of food: a global crisis. *New Left Review*, 197, 29-57
- Isakson, S.R. (2013) 'The financialization of food: A political economy of the transformation of agro-food supply chains' ICAS Review Paper Series No. 5
- Jennings, M. (2002) 'Almost an Oxfam in itself': Oxfam, Ujamaa and development in Tanzania. *African Affairs*, 101, 509-530.

- Kloppenborg, J. R. (2004). *First the seed: the political economy of plant biotechnology*. Madison: The University of Wisconsin Press.
- Kull, C.A. (1998) Leimavo revisited: Agrarian land-use change in the highlands of Madagascar. *Professional Geographer*, 50, 163-176
- \*\*Mazoyer, M. and Roudart, L. (2006) *A history of world agriculture from the neolithic age to the current crisis*. Earthscan, London CHAPTERS 10 and 11
- \*\*McMichael, P. (2009) A food regime genealogy. *The Journal of Peasant Studies*, 36, 139-169
- \*\*Patnaik, U. (2003) Global capitalism, deflation and agrarian crisis in developing countries. *Journal of Agrarian Change*, 3, 33-66
- Schneider, M. & McMichael, P. (2010) Deepening and repairing the metabolic rift. *The Journal of Peasant Studies*, 37, 461-484
- \*\*Scott, James (1998) *Seeing Like a State*. Yale University Press, New Haven – CHAPTER 7: Compulsory villagization in Tanzania, p. 223-261
- Sutton, I. (1989) Colonial agricultural policy: The non-development of the northern territories of the Gold Coast. *The International Journal of African Historical Studies*, 22, 637-669
- Watts, M. (1983) *Silent Violence: Food, famine and peasantry in northern Nigeria* Berkeley, University of California Press

*Questions to think about: How did colonial policies change agriculture in the Global South? How did policies and agriculture change between the 1960s and 1980s? How did neoliberalism change policy and agriculture? What is a 'food regime'? How did changes in the political economy of agriculture over the last 100 years affect rural households?*

#### **4. Understanding the drivers of rural livelihood decisions (IRS)**

In this lecture we will focus on the diverse factors that shape the activities and choices of rural agricultural households. Moving away from simple environmental determinism, we will look at agriculture as the product of cultural, political and economic factors operating at multiple spatial levels. We will use swidden cultivation as a case study to consider the various factors that shape the land use decisions of farmers in the Global South.

##### **General reading**

- Mazoyer, M. & Roudart, L. (2006) *A history of world agriculture from the neolithic age to the current crisis*. Earthscan London
- \*\*Netting, R.M. (1993) *Smallholders, Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture*. Stanford University Press, Stanford
- Scott, J.C. (1977) *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. Yale University Press, New Haven.

##### **Case study: Swidden agriculture**

- Angelsen, A. (1995) Shifting cultivation and "deforestation": A study from Indonesia. *World Development*, 23, 1713-1729
- Bezner Kerr, R. (2014) Lost and found crops: agrobiodiversity, indigenous knowledge, and a feminist political ecology of sorghum and finger millet in Northern Malawi. *Annals of the Association of American Geographers* 104 577-593
- Brookfield, H. and Padoch, C. (1994) 'Appreciating Agrodiversity - a Look at the Dynamism and Diversity of Indigenous Farming Practices'. *Environment*, 36, 37-45
- Carr, D. L. (2005) Forest clearing among farm households in the Maya Biosphere Reserve. *The Professional Geographer*, 57, 157-168
- Cramb, R. A., Colfer, C. J. P., Dressler, W., Laungaramsri, P., Le, Q.T., Mulyoutami, E., Peluso, N.L. and Wadley, R.L. (2009) Swidden Transformations and Rural Livelihoods in Southeast Asia, *Human Ecology*, 37, 323-346

- Geist, H. J., and Lambin, E.F. (2002) Proximate causes and underlying driving forces of tropical deforestation, *BioScience*, 52, 143-150
- Hume, D. W. (2006) Swidden agriculture and conservation in eastern Madagascar: Stakeholder perspectives and cultural belief systems. *Conservation and Society*, 4, 287-303
- Ickowitz, A. (2006) Shifting cultivation and deforestation in tropical Africa: Critical reflections. *Development and Change*, 37, 599-626
- Kekeya, M., and Y. Sugiyama (1985) Citemene, finger millet and Bemba culture: A socio-ecological study of slash-and-burn cultivation in northeastern Zambia. *African Study Monographs*, 4, 1-24
- \*\*Mazoyer, M. and Roudart, L. (2006) *A history of world agriculture from the neolithic age to the current crisis*. Earthscan, London CHAPTER 3
- Mertz, O., C. Padoch, J. Fox, R. A. Cramb, S. J. Leisz, N. T. Lam, and T. D. Vien. 2009. Swidden Change in Southeast Asia: Understanding Causes and Consequences. *Human Ecology*, 37, 259-264
- Moore, H. L., and M. Vaughan (1994) *Cutting Down Trees: Gender, nutrition, and agricultural change in the Northern Province of Zambia, 1890-1990*. James Currey, London
- Pollini, J. (2009) Agroforestry and the search for alternatives to slash-and-burn cultivation: From technological optimism to a political economy of deforestation. *Agriculture, Ecosystems and Environment*, 133, 48-60
- Réau, B. (2002) 'Burning for zebu: The complexity of deforestation issues in western Madagascar', *Norwegian Journal of Geography*, 56, 219-229
- Scales, I. R. (2011) Farming at the forest frontier: Land use and landscape change in western Madagascar, 1896 to 2005. *Environment and History*, 17, 499-524
- Scales, I. R. (2012) Lost in translation: conflicting views of deforestation, land use and identity in western Madagascar. *The Geographical Journal*, 178, 67-79
- Scales, I.R. (2014) 'The Drivers of Deforestation and the Complexity of Land Use in Madagascar' pp. 105-125 in I.R. Scales (ed) *Conservation and Environmental Management in Madagascar*, Routledge, London
- Stromgaard, P. (1989) Adaptive strategies in the breakdown of shifting cultivation: The case of Mambwe, Lamba, and Lala of Northern Zambia. *Human Ecology*, 17, 427-444
- VanWey, L.K., Ostrom, E. & Meretsky, V. (2005) Theories underlying the study of human-environment interactions. In *Seeing the Forest and the Trees: Human-environment interactions in forest ecosystems* (eds E. Moran & E. Ostrom). The MIT Press, Cambridge.
- Willis, K. J., Gillson, L. and Brncic, T.M. (2004) 'How "virgin" is virgin rainforest?'. *Science*, 304, 402-403

*Questions to think about: What are the cultural, political and economic factors that shape the decisions of rural agricultural households? How does the concept of a 'chain of explanation' transform our understanding of household agriculture? What are the strengths and limitations of the concept?*

## **5. The emerging political ecology of agriculture. Recent processes, emerging trends, important questions (IRS)**

This lecture will focus on recent agricultural trends in the Global South, including 'land grabs', the rapid expansion of biofuels, and the financialisation of agriculture. As well as looking at their political and economic drivers, we will consider their impacts on rural livelihoods and their implications for food security.

Bernstein, H. (2014) Food sovereignty via the 'peasant way': a skeptical view. *Journal of Peasant Studies* 41, pp. 1031-1063.

- Bezner Kerr, R. (2014) Lost and found crops: agrobiodiversity, indigenous knowledge, and a feminist political ecology of sorghum and finger millet in Northern Malawi. *Annals of the Association of American Geographers* 104, pp. 577–593.
- Borras, S. McMichael P. and Scoones, I. (2010) The politics of biofuels, land and agrarian change: editors' introduction. *The Journal of Peasant Studies*, 37, 575– 592
- Busch, L. and Juska, A. (1997) Beyond political economy: actor networks and the globalization of agriculture. *Review of International Political Economy*, 4, 688-708
- Bush, R. (2010) Food Riots: Poverty, Power and Protest. *Journal of Agrarian Change*, 10, 119-129
- Cotula, L. (2012) The international political economy of the global land rush: A critical appraisal of trends, scale, geography and drivers. *The Journal of Peasant Studies*, 39, 649-680
- Cotula, L., and S. Vermeulen (2009) Deal or no deal: the outlook for agricultural land investment in Africa. *International Affairs*, 85,1233-1247
- Cotula, L., Dyer, N., and Vermeulen, S. (2008) *Fuelling Exclusion? The Biofuels Boom and Poor People's Access to Land*. Rome/London, FAO/IIED. Available at <http://www.iied.org/pubs/display.php?o=12551IIED&n=8&l=252&c=land>.
- Dauvergne, P. and Neville, K. J. (2010) 'Forests, food, and fuel in the tropics: the uneven social and ecological consequences of the emerging political economy of biofuels'. *Journal of Peasant Studies*, 37, 631 - 660
- Demirbas, A. (2009) Political, economic and environmental impacts of biofuels: a review. *Applied Energy*, 86, 108-117
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### **Part III: The Political Ecology of Livestock**

#### **6. Competing claims and livestock herders: poverty, degradation, equilibrium (EEW)**

This lecture introduces the dominant narratives that have shaped attitudes to and policies towards pastoralists in East Africa. It focuses particularly on links made between pastoralists and environmental degradation in the past, and the ways in which these are still present today. The lecture also explores the nature and success of attempts to challenge the dominant narratives in the form of 'new range ecology' and reviews approaches that represent pastoralists as resilient and entrepreneurial in the context of climate change and globalization.

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*Questions to think about: What have been the dominant characteristics of policies towards pastoralists in the past and what was their impact? What is the role of science in policies for pastoralists? To what extent have policies been challenged as views have changed?*

## **7. Competing claims: climate and conflict (EEW)**

Explanations for violent conflict in Africa have often turned to environmental change and environmental scarcity as explanatory factors. The environmental-scarcity argument is often applied in relation to pastoralists, who have experienced relatively high levels of conflict and who live in comparatively 'harsh' environmental conditions. There are fears that climate change will lead inexorably to new 'climate change conflicts'. This lecture will examine these environmental-security discourses – their merits and weaknesses – and discuss their policy implications.

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*Questions to think about: What are the merits, and what are the dangers, of the discourses that link conflict in Africa to environmental processes? To what extent will climate change lead to new incidences of conflict, especially among pastoralists? How do discourses of environment and conflict feed through to policies and development practices?*

## **8. Competing visions: old and new policy directions (EEW)**

This lecture focuses on contemporary development policies for pastoralists. It examines the contention that there is a 'new pastoral development paradigm' and new 'policy space' for pastoralism in Africa. Building on lecture 5, that discussed biofuels, land grabs and food security in the 21st century, this lecture examines the debates about how to secure land for pastoralist activities today, and explores new initiatives in the context of old approaches to securing pastoralist group tenure rights in the past.

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*Questions to think about: To what extent has a more positive attitude towards pastoralist livelihoods been translated into positive support for pastoralists and their livelihoods? What have been the problems in allocating delineated and secure group rights to pastoralists and can these problems be overcome? To what extent do you agree that there is a new 'commons' emerging – what is it?*

## **Part IV: The Political Ecology of Forests**

### **9. The political ecology of forest and landscape restoration (BV)**

This lecture will introduce the idea of the 'political forest' (Vandergreest and Peluso 2015), and make the case for a political ecology approach to understanding forest and landscape restoration. While restoration is often associated with ideas of ecological improvement, the consequences of decisions in relation to land use often have differentiated impacts on the lives of people. This lecture will explore the risks of a technocratic approach to restoration, which neglects the tradeoffs associated with land use decisions, and the need to understand the winners and losers from decisions to alter current practices in relation to forests and landscapes. Examples will include recent commitments to restoration under the Bonn Challenge and REDD+.

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*Questions to think about: Who are the winners and losers when forest and landscape restoration projects are implemented? How do such initiatives impact on institutions and local governance? How are the livelihoods of poor people likely to be impacted by large scale restoration and/or REDD+ projects?*

## 10. The political ecology of forests and water (BV)

This lecture will focus on an emerging context for forest- and landscape-based interventions (in both the Global South and North), which recognize the potential for 'nature-based solutions' to secure the provision of water. These initiatives raise important questions about the underpinning knowledge systems which establish the links between landuse management and hydrological regimes; the ways in which this expertise is deployed to promote specific types of interventions (such as 'Payments for Ecosystem/Watershed Services'; and the winners and losers from these new forms of forest and landuse management, and from new regimes of ownership and control of water.

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*Questions to think about: How does knowledge about the links between forests and water privilege particular 'ways of knowing' about nature and society? Does the introduction of Payments for Watershed Services and/or Reciprocal Water Agreements provide an opportunity for elusive 'win-wins' in relation to environment and development? What are the implicit and explicit power dynamics that influence choices in relation to forests and water?*

## **11. The political ecology of forests and food (BV)**

This lecture focuses on the role of forests and landscapes in relation to the production of food. Agriculture and conservation have traditionally been seen as competitive landuses, especially in a world of growing demands and increasing pressure on land. Recent research suggests that a broader approach might help reconcile some of these tradeoffs, drawing also on a growing understanding of the role of forests and trees in relation to food and nutrition. However, choices over landuse strategies are always associated with differentiated outcomes for stakeholders across the landscape. The lecture will also address the debate over 'land sparing' and 'land sharing' as alternative landscape configurations, and the implications of these strategies for both conservation and food production.

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*Questions to think about – How should priorities between food production and forest conservation be discussed and negotiated? At what scales do these strategies compete with each other? How might an integrated landscape approach provide mechanisms to reconcile competing demands? What are the political ecology considerations in relation to managing landscapes for forests and food?*

## **Part V: Political Ecology of Conservation**

### **12. The political ecology of neoliberal conservation (CS)**

The study of the ideas and practices of nature conservation has been central to political ecology since it first emerged. This lecture explores the themes that make it so interesting to political ecologists and then describes in more detail the recent critical literature on ‘neoliberal conservation’, which seeks to harness markets and financial mechanisms to create incentives for conservation

*(Many items on this list are relevant to all three lectures by Chris Sandbrook).*

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*Questions to think about: What is conservation? Who is driving the neoliberal conservation agenda, and for what reasons?*

### **13. The political ecology of ecotourism (CS)**

This lecture explores the emergence of ‘ecotourism’ as a concept, and the extent to which it can be realised in practice. Using mountain gorilla tourism in Uganda as a case study, it examines optimistic and critical perspectives on ecotourism and its impacts for conservation and development, and the extent to which the gap between ecotourism rhetoric and reality can be explained through a political ecology analysis.

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### **Case study: Gorilla tracking tourism at Bwindi Impenetrable National Park**

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*Questions to think about: Is 'ecotourism' possible to achieve in practice? Can international tourism based on air travel and wealth inequalities ever be a tool for sustainable development? Is it ethical to fund conservation through super-luxury tourism in social contexts characterised by poverty?*

#### 14. The Political Ecology of Biodiversity Offsetting (CS)

In recent years 'biodiversity offsetting' has emerged as a tool for reconciling the seemingly contradictory objectives of conservation and economic development by enhancing the conservation status of one site as a means to compensate for damage done to biodiversity in another. This 'no net loss' approach holds the potential to open significant new funding streams for conservation, but also raises important technical and political questions about how to manage the ecological impacts of development, and the role of market-based tools in doing so.

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- Walker, S., A. L. Brower, R. T. T. Stephens, and W. G. Lee. 2009. Why bartering biodiversity fails. *Conservation Letters* 2: 149–157.
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*Questions to think about: Should offset policies and calculations take cultural values associated with biodiversity into account? Who stands to lose and gain from biodiversity offsetting?*

## **15. Conservation and the more-than-human (MB)**

This lecture will introduce what has come to be called ‘more-than-human’ geography: an arena of geographical enquiry that raises important questions about nonhuman agencies, potentials and forces and their role in forging socio-political outcomes. Taking political ecologists’ calls for incorporating of ‘ecology’ into the discipline (cf. Walker 2005) as a point of departure, it will examine what more-than-human geography has to offer for understanding the politics of nature without privileging humans as the sole actors. The lecture will introduce key ideas and concepts through conservation examples from the global south, including wildlife conservation and/or invasive species management. In conclusion, it will reflect on what claims and impulses of more-than-human approaches offer up for engaging critically with conservation practice.

- \*\*Barua M. (2014b) Volatile ecologies: towards a material politics of human-animal relations. *Environment and Planning A* 46: 1462–1478.
- Braun B. (2008) Environmental issues: inventive life. *Progress in Human Geography* 32: 667–679.

- Braun B and Whatmore S. (2010) The Stuff of Politics: An Introduction. In: Braun B and Whatmore S (eds) *Political matter: technoscience, democracy, and public life*. Minneapolis, MN: University of Minnesota Press, ix-xxxv.
- \*\*Davis MA, Chew MK, Hobbs RJ, et al. (2011) Don't judge species on their origins. *Nature* 474: 153-154. **And response by:** Simberloff D. (2011) Non-natives: 141 scientists object. *Nature* 475: 36.
- Hinchliffe S. (2003) Inhabiting: landscapes and natures. In: Anderson K, Domosh M, Pile S, et al. (eds) *The Handbook of Cultural Geography*. London: Sage, 207-226.
- Jepson P, Barua M and Buckingham K. (2011) What is a Conservation Actor? *Conservation and Society* 9: 229-235.
- Turner MD. (2015) Political ecology II: Engagements with ecology. *Progress in Human Geography* 10.1177/0309132515577025.
- \*\*Walker PA. (2005) Political ecology: where is the ecology? *Progress in Human Geography* 29: 73-82.
- Whatmore S. (2002) *Hybrid geographies: natures, cultures, spaces.*, London: Sage.
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- \*\*Whatmore S and Thorne L. (1998) Wild(er)ness: reconfiguring the geographies of wildlife. *Transactions of the Institute of British Geographers* 23: 435-454.

### Case Studies

- Barua M. (2014a) Bio-geo-graphy: landscape, dwelling and the political ecology of human-elephant relations. *Environment and Planning D: Society and Space* 32: 915-934.
- Chew MK and Hamilton AL. (2011) The Rise and Fall of Biotic Nativeness: A Historical Perspective. In: Richardson DM (ed) *Fifty Years of Invasion Ecology: The Legacy of Charles Elton*. Oxford: Wiley-Blackwell, 35-48.
- Hinchliffe S. (2008) Reconstituting nature conservation: Towards a careful political ecology. *Geoforum* 39: 88-97.
- Hinchliffe S, Kearnes MB, Degen M, et al. (2005) Urban wild things: a cosmopolitical experiment. *Environment and Planning D: Society and Space* 23: 643-658.
- Jadhav S and Barua M. (2012) The Elephant Vanishes: Impact of Human-Elephant Conflict on People's Wellbeing. *Health & Place* 18: 1356-1365.
- Lorimer J. (2010) Elephants as companion species: the lively biogeographies of Asian elephant conservation in Sri Lanka. *Transactions of the Institute of British Geographers* 35: 491-506.
- Robbins P. (2004) Comparing invasive networks: cultural and political biographies of invasive species\*. *Geographical Review* 94: 139-156.

Questions: *What is more-than-human geography? In what ways does it add to the analytical repertoire of political ecology? How does it enable us to engage with the practices and politics of conservation*

## 16. Lively capital (MB)

Relations between nature and capital have been a long-standing concern within political ecology. One of its key contributions has been the 'production of nature' thesis, which seeks to explain how nature is produced, and transformed, through capitalist relations (Smith 2007). Whilst of import for understanding the commercialization and marketization of nature, this thesis posits capital as the driving force, failing to account for the difference ecological potentials make to the process of accumulation (Barua 2016, Guthman 2011). Building upon the previous lecture on incorporating ecology into political ecology, this lecture will seek to understand the dynamics of capital relationally, particularly in

situations where life itself becomes a source of accumulation. Its focus will be on charismatic species (Lorimer 2007), and how these are deployed within political economies of conservation (Duffy 2014). The lecture will introduce key ideas pertaining to commodification, labour, value and capital, and how these might be understood in more-than-human registers (Barua 2017, Collard and Dempsey 2013). In conclusion, it will reflect on the implications of a relational approach for both understanding the dynamics of capital and the political ecologies of conservation more broadly.

\*\*Barua, M. (2016) Lively Commodities and Encounter Value. *Environment and Planning D: Society and Space*, 34, 725-744.

Barua, M. (2017) Nonhuman labour, encounter value, spectacular accumulation: the geographies of a lively commodity. *Transactions of the Institute of British Geographers*, 42, 274-288.

Collard, R.-C. & J. Dempsey (2013) Life for sale? The politics of lively commodities. *Environment and Planning A*, 45, 2682-2699.

Duffy, R. (2014) Interactive elephants: Nature, tourism and neoliberalism. *Annals of Tourism Research*, 44, 88-101.

Guthman, J. (2011) Bodies and Accumulation: Revisiting Labour in the 'Production of Nature'. *New Political Economy*, 16, 233-238.

\*\*Lorimer, J. (2007) Non-human charisma. *Environment and Planning D: Society and Space*, 25, 911-932.

Smith, N. (2007) Nature as accumulation strategy. *Socialist Register*, January, 1-36.

\*\*Watts, M. 2005. Commodities. In *Introducing Human Geographies*, eds. P. Cloke, P. Crang & M. Goodwin, 527-546. Abingdon, Oxon.: Hodder Arnold.

Questions: *How is life becoming a locus of capitalist accumulation? What bearings does nature have upon the logics of accumulation? How might we could understand the commodification of nature in relational terms?*

## Supervision essay questions

Each student should have four supervisions. Sign up details and timings will be circulated separately.

### Michaelmas Term

#### Part I: 'The Political Ecology of Agriculture'

Please answer ONE of the following questions:

- 1) 'Genetic engineering has never been about saving the world, it's about controlling the world' (Vandana Shiva, 2012). Discuss this statement in relation to smallholder farms in the Global South
- 2) 'Household farms represent the past and not the future of agriculture in the global South.' Discuss

#### Part II: 'The Political Ecology of Livestock'

Please answer ONE of the following questions:

- 1) Critically evaluate the statement that the misunderstanding of pastoralist ecology has resulted in the failure of pastoralist development programmes.
- 2) 'A political ecology of pastoralism challenges assumptions about the driving forces of conflicts'. Discuss.
- 3) To what extent has the 'new pastoral paradigm' been translated into policies that make a positive difference to the livestock herders in the rural South?

### Lent Term

#### Part III 'The Political Ecology of Forests'

Please answer **ONE** of the following questions:

- 1) To what extent can REDD+ be understood as the latest stage in the history of the 'political forest' (Vandergreest and Peluso 2015).
- 2) Compare and contrast the political ecologies of managing forests through land sparing and land sharing approaches
- 3) To what extent can the concept of forest-based ecosystem services help to reconcile conflict over forest and landscape management?

#### Part IV 'The Political Ecology of Conservation'

Please answer **ONE** of the following questions:

- 1) Assess the validity and significance of the assertion that markets, private actors and NGOs have replaced the state as the key actors in contemporary conservation in the Global South
- 2) Nature that cannot be commodified cannot be saved. Discuss.