

# Literature list

## Sustainability Science: The Field Development (MN)

1. Kates, Robert W., et al. (2001). Sustainability Science. *Science* 292(5517) (2 pages)
2. Clark, W. C. (Ed.). (2007). Sustainability science: A room of its own. *Proceedings of the National Academy of Sciences (PNAS)*, 104(6), 1737-1738. (2 pages)
3. Spangenberg, J. H. (2011). Sustainability science: a review, an analysis and some empirical lessons. *Environmental Conservation*, 38(3), 275-287. (13 pages)
4. **Jerneck, A.**, Olsson, L., Ness, B., Anderberg, S., Baier, M., Clark, E., ... & Persson, J. (2011). Structuring sustainability science. *Sustainability science*, 6, 69-82. (13 pages)
5. Clark, W. C., & **Harley, A.** (2020). Sustainability Science: Toward a Synthesis. *Annual Review of Environment and Resources*, 45, 331-386. (45 pages)
6. Caniglia, G., Luederitz, C., von Wirth, T., Fazey, I., Martín-López, B., **Hondrila, K.**, ... & Lang, D. J. (2021). A pluralistic and integrated approach to action-oriented knowledge for sustainability. *Nature Sustainability*, 4(2), 93-100. (7 pages)

*Recommended:*

1. Clark, William C. & **Dickson, Nancy** M. (2003). Sustainability Science: the emerging research program. *PNAS* 100(14): 8059-8061.(3 pages)
2. Bettencourt, L. M., & **Kaur, J.** (2011). Evolution and structure of sustainability science. *PNAS*, 108(49), 19540-19545. (6 pages)
3. Sellberg, M. M., **Cockburn, J.**, Holden, P. B., & Lam, D. P. (2021). Towards a caring transdisciplinary research practice: navigating science, society and self. *Ecosystems and People*, 17(1), 292-305. (13 pages)

## Resilience, Social-Ecological Systems (MS):

1. Folke, C. (2006). Resilience: The emergence of a perspective for social–ecological systems analyses. *Global environmental change*, 16(3), 253-267. (15 pages)
2. Anderies, J. M., Janssen, M. A., & **Ostrom, E.** (2004). A framework to analyze the robustness of social-ecological systems from an institutional perspective. *Ecology and society*, 9(1). (17 pages)
3. Reyers, B., Folke, C., Moore, M. L., Biggs, R., & Galaz, V. (2018). Social-ecological systems insights for navigating the dynamics of the Anthropocene. *Annual Review of Environment and Resources*, 43, 267-289. (23 pages)

4. The resilience of the resilience debate. *Nat Sustain* 2, 887 (2019).  
<https://doi.org/10.1038/s41893-019-0411-2> (1 page)

*Recommended:*

1. Ostrom, E. (2009). A general framework for analyzing sustainability of social-ecological systems. *Science*, 325(5939), 419-422. (3 pages)

### **Sustainability Transitions, Social-Technological Systems (MN):**

1. Köhler, J., Geels, F. W., Kern, F., Markard, J., Onsongo, E., Wieczorek, A., ... & Wells, P. (2019). An agenda for sustainability transitions research: State of the art and future directions. *Environmental innovation and societal transitions*, 31, 1-32. (32 pages)
2. Geels, F. W. (2019). Socio-technical transitions to sustainability: A review of criticisms and elaborations of the Multi-Level Perspective. *Current opinion in environmental sustainability*, 39, 187-201. (14 pages)
3. Loorbach, D., Frantzeskaki, N., & Avelino, F. (2017). Sustainability transitions research: transforming science and practice for societal change. *Annual review of environment and resources*, 42, 599-626. (27 pages)

*Recommended:*

1. Avelino, F., Grin, J., Pel, B., & Jhagroo, S. (2016). The politics of sustainability transitions. *Journal of Environmental Policy & Planning*, 18(5), 557-567. (10 pages)
2. Geels, F. W. (2022). Causality and explanation in socio-technical transitions research: Mobilising epistemological insights from the wider social sciences. *Research policy*, 51(6), 104537. (14 pages)
3. Geels, F. W., Kern, F., & Clark, W. C. (2023). System transitions research and sustainable development: Challenges, progress, and prospects. *PNAS* 120(47) (6 pages)

### **Governance of Sustainability (BV):**

1. Biermann, F. (2007) ‘Earth system governance’ as a crosscutting theme of global change research. *Global Environmental Change*, Volume 17, Issues 3–4, pp. 326-337 (11 pages)
2. Patterson et al. (2017) Exploring the governance and politics of transformations towards sustainability. *Environmental Innovation and Societal Transitions*, Volume 24, pp. 1-16. (16 pages)
3. Earth System Governance, Science Plan. <https://www.earthsystemgovernance.org/wp-content/uploads/2018/11/Earth-System-Governance-Science-Plan-2018.pdf> (selected parts, 20 pages)

## **Political Economy (SV)**

1. Paul, D., & Amawi, A. (Eds.). (2013). The theoretical evolution of international political economy: A reader. *Oxford University Press*, USA. Introduction pp 1-39 (39 pages)
2. Bernstein, H. (2010). Class dynamics of agrarian change (Vol. 1). *Kumarian Press*. Chapter 1 (11 pages)
3. Pearse, R. (2021). Theorising the political economy of energy transformations: Agency, structure, space, process. *New Political Economy*, 26(6), 951-963. (12 pages)
4. Scoones, I., Borras Jr, S. M., Baviskar, A., Edelman, M., Peluso, N. L., & Wolford, W. (2023). Climate Change and Critical Agrarian Studies. Chapter 1 (28 pages)

*Recommended:*

1. Peck, J. (2023). Explaining (with) neoliberalism. In Neoliberalism and Education (pp. 17-42). *Routledge*. (25 pages)
2. McKay, B., Sauer, S., Richardson, B., & Herre, R. (2016). The political economy of sugarcane flexing: initial insights from Brazil, Southern Africa and Cambodia. *The Journal of Peasant Studies*, 43(1), 195-223. (28 pages)

## **Political Ecology (MI):**

1. Forsyth, T. (2003). Critical Political Ecology. The politics of environmental science. Chapter 1, 5 and 10. *Routledge*. London. (65 pages)
2. Paulsson, S., Gezon, L. and Watts, M. (2003). Locating the Political in Political Ecology: An Introduction. *Human Organization*, Vol. 62, No. 3. (9 pages)
3. Thomas-Slayter, B. Wangari, E and Rocheleau, D. (2019). Chapter 13. Feminist Political Ecology. Crosscutting themes, theoretical insights, policy implications in (eds). Rocheleau, D, Thomas-Slayter, B and Wangari, E. Feminist Political Ecology. Routledge. London. (24 pages).

*Recommended:*

1. Gomez-Bagethun, E. (2020). More is more. Scaling political ecology within limits to growth. *Political Geography* 76. (5 pages)
2. Robbins, P. (2020). Is less more ... or is more less? Scaling the political ecologies of the future. *Political Geography* 76. (5 pages)

## **Social Movements for Sustainability (DH):**

1. McAdam, Douglas, McCarthy, J. D., & Zald, M. N. (2008). Introduction: Opportunities, mobilizing structures, and framing processes – toward a synthetic, comparative perspective

on social movements. In McAdam, D., McCarthy, J. D., Zald, M. N. (Eds.). Comparative Perspectives on Social Movements. Political Opportunities, Mobilizing Structures, and Cultural Framings. (pp. 1-20). *Cambridge University Press*. (20 pages)

2. McAdam, D., Tarrow, S., & Tilly, C. (2009). Comparative perspectives on contentious politics. In Irving Lichbach, M. & Zuckerman, A. S. (Eds.). Comparative politics: Rationality, culture, and structure (pp. 260-290). *Cambridge University Press*. (30 pages)

*Recommended:*

1. McAdam, Douglas. (2017). Social movement theory and the prospects for climate change activism in the United States. *Annual Review of Political Science*, 20, 189-208. (19 pages).

2. Dwivedi, Ranjit (2001) Environmental Movements in the Global South, *International Sociology* 16(1), 11-31 (20 pages)

3. Forsyth, Timothy (2007) Are Environmental Social Movements Socially Exclusive? An Historical Study from Thailand. *World Development* 35(12), 2110-2130 (20 pages)

4. **Della Porta, Donatella\*** (2014) Social Movement Studies and Methodological Pluralism. Chapter 1 in D. Della Porta\* ‘Methodological Practices in Social Movement Research’ (pp. 1-20). Oxford University Press. (20 pages)

### **Methods of Critiques and Theory building (MN):**

1. **Schlüter, M.**, Caniglia, G., Orach, K., Bodin, Ö., Magliocca, N., Meyfroidt, P., & Reyers, B. (2022). Why care about theories? Innovative ways of theorizing in sustainability science. *Current Opinion in Environmental Sustainability*, 54, 101154. (10 pages)

2. Danermark, B. (2019). Applied interdisciplinary research: A critical realist perspective. *Journal of Critical Realism*, 18(4), 368-382. (14 pages)

*Recommended:*

1. **Price, L.** (2016). Using retrodiction to address wicked problems. In P. Naess & L. Price (Eds.), *Crisis system: A critical realist and environmental critique of economics and the economy* (pp. 109–129). London and New York: Routledge. (20 pages)

2. Nagatsu, M., Davis, T., DesRoches, C. T., Koskinen, I., MacLeod, M., Stojanovic, M., & Thorén, H. (2020). Philosophy of science for sustainability science. *Sustainability Science*, 15, 1807-1817. (10 pages)

### **Mixed Methods (EJ):**

1. **Hesse-Biber** S. N. (2010). Mixed methods research: Merging theory with practice. Guilford Press. pp 1-19 (19 pages)

2. Von Wehrden, H., Luederitz, C., Leventon, J., & Russell, S. (2017). Methodological challenges in sustainability science: A call for method plurality, procedural rigor and longitudinal research. *Challenges in Sustainability*, 5(1), 35-42. (7 pages)
3. **Nightingale**, A. (2003). A feminist in the forest: Situated knowledges and mixing methods in natural resource management. *ACME: An International Journal for Critical Geographies*, 2(1), 77-90. (13 pages)

*Recommended:*

1. **Herrmann**, S. M., Sall, I., & Sy, O. (2014). People and pixels in the Sahel: a study linking coarse-resolution remote sensing observations to land users' perceptions of their changing environment in Senegal. *Ecology and Society*, 19(3). (18 pages)
2. **Johansson**, E. L., & Abdi, A. M. (2020). Mapping and quantifying perceptions of environmental change in Kilombero Valley, Tanzania. *Ambio*, 49(2), 557-568. (11 pages)

### **Case Study Methods (DH):**

1. Burawoy, Michael (1998). The extended case method. *Sociological theory*, 16(1), 4-33. (29 pages)
2. Elder-Vass, David (2010). *The problem of structure and agency*. Chapter 1 in D. Elder-Vass 'The Causal Power of Social Structures – Emergence, Structure and Agency', Cambridge University Press. pp. 1-9. (9 pages)
3. Wright Mills, Charles (2000). *The Promise*. Chapter 1 in C. Wright Mills 'The Sociological Imagination' (pp. 3-13). Oxford University Press. (11 pages).

*Recommended:*

1. Burawoy, Michael (2009). *The extended case method: Four countries, four decades, four great transformations, and one theoretical tradition*. University of California Press. (selected chapters 100 pages).

### **Ethnographic Research and Positionality (TK, MI):**

1. Massoud, M. F. (2022). The price of positionality: assessing the benefits and burdens of self-identification in research methods. *Journal of Law and Society*, 49, S64-S86. (23 pages)
2. **Hausermann**, H., & Adomako, J. (2022). Positionality, 'the field,' and implications for knowledge production and research ethics in land change science. *Journal of Land Use Science*, 17(1), 211-225. (14 pages)
3. **Zaragocin**, S., & Caretta, M. A. (2021). Cuerpo-territorio: A decolonial feminist geographical method for the study of embodiment. *Annals of the American Association of Geographers*, 111(5), 1503-1518. (15 pages)

*Recommended:*

1. Staffa, R.K.; Riechers, M.; Martín-López, B. (2022) Correction to: A feminist ethos for caring knowledge production in transdisciplinary sustainability science. *Sustain. Sci.* 2022, 17, 323. (19 pages)
2. Chilisa, B. (2017) Decolonising transdisciplinary research approaches: An African perspective for enhancing knowledge integration in sustainability science. *Sustain. Sci.*, 12, 813–827. (14 pages)

### **Descriptive Analytical Methods (EJ)**

1. Verburg, PH, Crossman, N., Ellis, EC, Heinemann, A., Hostert, P., Mertz, O., ... & Zhen, L. (2015). Land system science and sustainable development of the earth system: A global land project perspective. *Anthropocene* , 12 , 29-41. (12 pages)
2. Richardson, K., Steffen, W., Lucht, W., Bendtsen, J., Cornell, S. E., Donges, J. F., ... & Rockström, J. (2023). Earth beyond six of nine planetary boundaries. *Science Advances*, 9(37), eadh2458. (16 pages)
3. Hansen, M. C., Potapov, P. V., Moore, R., Hancher, M., Turubanova, S. A., Tyukavina, A., ... & Townshend, J. (2013). High-resolution global maps of 21st-century forest cover change. *science*, 342(6160), 850-853. (3 pages)
4. Seaquist, J. W., Johansson, E. L., & Nicholas, K. A. (2014). Architecture of the global land acquisition system: applying the tools of network science to identify key vulnerabilities. *Environmental Research Letters*, 9(11), 114006. (13 pages)

*Recommended:*

1. Liu, J., Hull, V., Batistella, M., DeFries, R., Dietz, T., Fu, F., ... & Zhu, C. (2013). Framing sustainability in a telecoupled world. *Ecology and Society*, 18(2). (19 pages)
2. Foley, J. A., DeFries, R., Asner, G. P., Barford, C., Bonan, G., Carpenter, S. R., ... & Snyder, P. K. (2005). Global consequences of land use. *science*, 309(5734), 570-574. (4 pages)
3. Sayles, J. S., Mancilla Garcia, M., Hamilton, M., Alexander, S. M., Baggio, J. A., Fischer, A. P., ... & Pittman, J. (2019). Social-ecological network analysis for sustainability sciences: a systematic review and innovative research agenda for the future. *Environmental Research Letters*, 14(9), 093003. (19 pages)
4. Pradhan, P., Costa, L., Rybski, D., Lucht, W., & Kropp, J. P. (2017). A systematic study of sustainable development goal (SDG) interactions. *Earth's Future*, 5(11), 1169-1179. (10 pages)

### **Future thinking and planning (EJ)**

1. Wiek, A., & Iwaniec, D. (2014). Quality criteria for visions and visioning in sustainability science. *Sustainability Science*, 9, 497-512. (15 pages)
2. Swart, R. J., Raskin, P., & Robinson, J. (2004). The problem of the future: sustainability science and scenario analysis. *Global environmental change*, 14(2), 137-146. (9 pages)
3. Sharpe, B., Hodgson, A., Leicester, G., Lyon, A., & Fazey, I. (2016). Three horizons: a pathways practice for transformation. *Ecology and Society*, 21(2). (15 pages)
4. Johansson, E. L. (2021). Participatory futures thinking in the African context of sustainability challenges and socio-environmental change. *Ecology & Society*, 26(4). (17 pages)
5. Bennett, E. M., Solan, M., Biggs, R., McPhearson, T., Norström, A. V., Olsson, P., ... & Xu, J. (2016). Bright spots: seeds of a good Anthropocene. *Frontiers in Ecology and the Environment*, 14(8), 441-448. (7 pages)

**Recommended:**

1. Pereira, L. M., Davies, K. K., den Belder, E., Ferrier, S., Karlsson-Vinkhuyzen, S., Kim, H., ... & Lundquist, C. J. (2020). Developing multiscale and integrative nature–people scenarios using the Nature Futures Framework. *People and Nature*, 2(4), 1172-1195. (23 pages)
2. Terry et al., (2024). Inviting a decolonial praxis for future imaginaries of nature: Introducing the Entangled Time Tree. *Environmental Science & Policy*, 151 (11 pages)
3. Burch, S., Gupta, A., Inoue, C. Y., Kalfagianni, A., Persson, Å., Gerlak, A. K., ... & Zondervan, R. (2019). New directions in earth system governance research. *Earth system* (18 pages)
4. O'Neill, B. C., Kriegler, E., Riahi, K., Ebi, K. L., Hallegatte, S., Carter, T. R., ... & Van Vuuren, D. P. (2014). A new scenario framework for climate change research: the concept of shared socioeconomic pathways. *Climatic change*, 122, 387-400. (13 pages)

**Critical Reflection on Knowledge (Co)Production in SS (EJ)**

1. Turnhout, E., Metze, T., Wyborn, C., Klenk, N., & Louder, E. (2020). The politics of co-production: participation, power, and transformation. *Current Opinion in Environmental Sustainability*, 42, 15-21. (6 pages)
2. Chambers, J. M., Wyborn, C., Ryan, M. E., Reid, R. S., Riechers, M., Serban, A., ... & Pickering, T. (2021). Six modes of co-production for sustainability. *Nature Sustainability*, 4(11), 983-996. (13 pages)
3. Caniglia, Guido, et al. "Practical wisdom and virtue ethics for knowledge co-production in sustainability science." *Nature Sustainability* (2023): 1-9. (9 pages)

*Recommended:*

1. Kelly, O., White, P., Butera, F., Illingworth, S., Martens, P., Huynen, M., ... & Cowman, S. (2023). A transdisciplinary model for teaching and learning for sustainability science in a rapidly warming world. *Sustainability Science*, 1-16. (16 pages)
2. Norström, A. V., Cvitanovic, C., Löf, M. F., West, S., Wyborn, C., Balvanera, P., ... & Österblom, H. (2020). Principles for knowledge co-production in sustainability research. *Nature sustainability*, 3(3), 182-190. (8 pages)
3. Sellberg, M. M., Cockburn, J., Holden, P. B., & Lam, D. P. (2021). Towards a caring transdisciplinary research practice: navigating science, society and self. *Ecosystems and People*, 17(1), 292-305. (13 pages)

Required readings: 815

Recommended readings: 515 pages

Female authors