Environmental Institutions ESM 248, Winter 2024 Class meeting: Tuesdays & Thursdays 8 am - 9:15 am Location: Bren Hall 1510 Instructor: Yifan (Flora) He (she/her) Email: yifan_he@bren.ucsb.edu Office hours: TBD

Course Summary

Institutions are rules, both formal and informal, that shape interactions between individuals, groups, and organizations. Because institutions exist in a vast array of forms at many different levels, they affect nearly every aspect of environmental management. This course provides tools that can be used to analyze informal, local, national, and international institutions. By recognizing the myriad of rules that affect the design and implementation of environmental management, you will be equipped to anticipate outcomes of strategies to address environmental problems in many settings.

Critical to all types of institutional analysis are the concepts of *rule-making*, *enforcement*, and *monitoring*. Institutions such as national constitutions, cultural practices, or organizational procedures shape how rules are made. For any rule to affect behavior, some entity must be willing to impose costs for non-compliance or provide benefits for compliance. Mechanisms of enforcement include social pressures, market demand, legal sanctions, and reputation. To be able to enforce rules, information about compliance must be available. Monitoring produces this information and comes about through dense social relationships, government audits, private certification schemes, and voluntary reporting requirements, among many other possibilities. Institutional analysis seeks to diagnose the ways that behaviors can be shifted in desirable directions through rule-making, monitoring, and enforcement strategies. As we will see, environmental policies and management activities are seldom effective if they are not nested within supporting institutions.

Learning Objectives

At the end of the course, you should be able to:

- 1. Identify different types of institutions in various environmental settings; explain how they affect individual and organizational behaviors and environmental outcomes
- 2. Articulate different strategies for rule-making, enforcement, and monitoring in environmental institutions; analyze their costs and effects on environmental outcomes.
- 3. Propose institutional innovations to address environmental problems; anticipate challenges in institution building and institutional change
- 4. Evaluate the origin and distributional consequences of different environmental institutions
- 5. Conduct and communicate institutional analyses in professional settings

Assessment	Description	Due date	Learning Objectives	% of Grade
Class participation	Weekly discussion forum posts (at least seven times throughout the quarter)	By 5 pm on Mondays starting from week 2	LOs 1, 2	30%
	Participation in case study activities	Sessions 3.2 (1/25, Th) and 6.1 (2/13, Tu)	LOs 2,4,5	
	Overall class attendance and engagement in discussions		LOs 1, 2, 4, 5	
Mini-Project 1: Institutional Profile (individual)		1/23 (Tu) at 5 pm	LOs 1, 4, 5	15%
Mini-Project 2: Distributional consequences of institutions (group)		2/6 (Tu) at 5 pm	LOs 1, 2, 4	15%

Assessments breakdown

Mini-Project 3: Monitoring brief (group)	Poster presentation of draft proposal & peer feedback	2/22 (Th) during class	LOs 3, 5	15%
	Final policy memo	2/29 (Th) at 5 pm		
Mini-Project 4: Institutional Proposal	PowerPoint presentation of draft & peer feedback	3/14 (Th) during class	LOs 3, 4, 5	25%
(group)	Final policy memo	3/21 (Th) at 5 pm		

More on assessments and grading

<u>Mini-Projects:</u> The main goal of this course is to use institutional analysis to complete tasks found in professional settings. As such, the course is built around four mini-projects, which will be outlined in separate documents. For the mini-projects 2-4, you are encouraged to collaborate with up to two classmates. You may only collaborate with the same group **one** time. Everyone in a group must take full ownership of the final project and will receive the same grade.

Participation: Your active participation is important for the success of this course. Unlike a traditional lecture course evaluated by exams, sessions have been designed to build skills through active participation, discussion, and activities. I expect that you will closely read all of the assigned articles and/or documents before coming to class and that you will be prepared to engage in all discussions and activities. In addition, you will be required to prepare professional presentations for some mini-projects, the quality of which will factor into both your participation and assignment grades. You are expected to attend all course sessions. Contact me beforehand if you need to miss class for a legitimate reason, otherwise absences will negatively affect your participation grade.

Assignment completion policy: You must complete all assignments to pass the course.

<u>Academic Honesty:</u> I expect you to adhere to the highest standards of academic honesty. This means only turning in work that is your own and properly citing all information and ideas that you draw from others. Any assignment that does not adhere to UCSB academic honesty guidelines will not receive credit and will be referred to campus judicial procedures. See the linked guidelines.

Use of generative AI in writing assignments:

You are expected to produce original institutional analyses and use generative AI tools mainly to improve language and readability of your work. If you choose to use generative AI tools for

any assignments in this class, I expect you to use them critically and ethically. As predictive models based on training data, AI can generate outputs that are incorrect, incomplete, violates copyrights, or reflect existing biases and misconceptions. You should carefully review and edit the result, as you are responsible for all contents of work. You must disclose the use of generative AI by adding a statement explaining:

- What AI tool you used, and for what purposes
- What prompts you used to get the results

*Tentative Schedule

* Note that during the course it is possible that some of the topics and readings will have their contents altered. I will try to provide as much advance warning of changes as possible.

Key for types of class sessions: Discussion, Lecture, Activity, Presentations

UNIT 1: INSTITUTIONAL FORMS AND FEATURES

Week 1

Session 1.1 (Tu 1/9) – Institutional roots of environmental problems (L&D)

Why do environmental solutions that are well-conceived fail during implementation?

North, *Institutions, Institutional Change, and Economic Performance*, Ch. 1 Moe, T. M. (2005). Power and Political Institutions. *Perspectives on Politics*, *3*(2), 215–233.

Session 1.2 (Th 1/11) – Recognizing different types of institutions (L&A)

What types of institutions affect environmental outcomes? What is the difference between formal and informal institutions? What levels of institutions exist?

Note: we will do a jigsaw exercise for Thursday's reading. Please respond to the canvas survey to pick one out of the four readings to focus on, and be prepared to share it with the rest of the class.

- Ostrom, Governing the Commons, Ch. 2. An institutional approach to the study of selforganization and self-governance in CPR situations (29-57)
- Cox, M., Arnold, G., & Tomás, S. V. (2010). A review of design principles for community-based natural resource management. *Ecology and Society,* 15(4).
- Yami, M., Vogl, C., Hausera, M., Whitehouse, A., Saravanan, V. S., Dujovny, E., ... & Rehel, S. (2009). Comparing the Effectiveness of Informal and Formal Institutions in Sustainable Common Pool Resources Management in Sub-Saharan Africa. *Conservation & Society*, 7(3).

Pellowe, K. E., & Leslie, H. M. (2020). The interplay between formal and informal institutions and the potential for co-management in a Mexican small-scale fishery. *Marine Policy*, *121*, 104179.

Discussion prompt:

In what context are informal institutions more likely to arise and be effective in governing common pool resources? When do you think formal institutions such as those of state and market may be more effective?

Week 2

Session 2.1 (Tu 1/16) – Institutional profile (L, D)

Examples of institutional profiles, read at least one:

- Chiyemura, F., Shen, W., Burgess, M., Mulugetta, Y., & Wang, Y. (2023). A dynamic institutional analysis of China's engagement with Africa's renewable energy market. *Environmental Politics*, *32*(7), 1140–1162.
- Langridge, R., & Ansell, C. (2018). Comparative Analysis of Institutions to Govern the Groundwater Commons in California. *Water Alternatives*, 11(3): 481-510.
- Petursson, J. G., Vedeld, P., & Vatn, A. (2013). Going Transboundary? An Institutional Analysis of Transboundary Protected Area Management Challenges at Mt Elgon, East Africa. *Ecology and Society, 18*(4).
- Residential Energy: How do we reduce racial disparities in energy burdens? <u>https://www.learngala.com/cases/91459dd4-b0f9-4dcb-b651-5fb37600dacc/1</u>
- Richmond, L. & Levine, A. (2012). Institutional analysis of community-based marine resource management initiatives in Hawai'i and American Samoa. Pacific Islands Fisheries Science Center. NOAA Technical Memorandum NMFS-PIFSC-35.
- Sarr, S., Hayes, B., & DeCaro, D. A. (2021). Applying Ostrom's Institutional Analysis and Development framework, and design principles for co-production to pollution management in Louisville's Rubbertown, Kentucky. *Land Use Policy*, 104, 105383.
- Swette, B., & Lambin, E. F. (2021). Institutional changes drive land use transitions on rangelands: The case of grazing on public lands in the American West. Global Environmental Change, 66, 102220. https://doi.org/10/ghvk4z

Discussion prompt:

Mini-institutional analysis: In your post, include: (i) a description of an environmental outcome; (2) an analysis of a human behavior that contributes to the outcome; (3) a description one formal institution that drives that behavior; and (4) a description of one informal institution that drives the behavior.

Mini-project #1 (Institutional Profile): identify the institutional features that affect the current status of an environmental resource of your choice and submit a 2-3 page institutional profile. Due Tuesday 1/23 at 5 pm.

UNIT 2: RULE-MAKING

Session 2.2 (Th 1/18) – Self-organized institutions (L)

Under what conditions can groups of people create their own rules to solve environmental problems without relying on the government?

Ostrom, Governing the Commons, Ch. 6

Choose one:

- Basurto, X. (2005). How locally designed access and use controls can prevent the tragedy of the commons in a Mexican small-scale fishing community. *Society and Natural Resources*, 18(7), 643-659.
- Klooster, D. (2000). Institutional Choice, Community, and Struggle: A Case Study of Forest Co-Management in Mexico. *World Development*, *28*(1), 1–20. <u>https://doi.org/10.1016/S0305-750X(99)00108-4</u>

Discussion prompt:

Share one or two insights you gained from Ostrom's framework for analyzing self-governing common pool resources (CPRs). Think about an example of CPR of your interest. Is this framework helpful in explaining the situation of CPR governance?

Week 3

Session 3.1 (Tu 1/23) – Governments as rule-making institutions (L)

How does the structure of government and procedures for making choices affect the types of rules that are adopted to manage environmental problems?

- Tsebelis, G. (1995). Decision making in political systems: Veto players in presidentialism, parliamentarism, multicameralism and multipartyism. *British Journal of Political Science*, *25*(3), 289-325.
- Cooper, J., Kim, S. E., & Urpelainen, J. (2018). The Broad Impact of a Narrow Conflict: How Natural Resource Windfalls Shape Policy and Politics. *Journal of Politics*, 80(2), 630-646.

Discussion prompt:

Does Tsebelis' veto player framework help explain climate policy change in the US or another context you are familiar with? What does Cooper *et al.* (2018) tell us about the effects of natural resources windfalls on elections?

Session 3.2 (Th 1/25) – Participation and rule-making (A)

When does public participation affect the outcomes of public rule-making and when does it not? Is more public participation always desirable?

- McKenny I., Friese M., and Norton R. Farming and Fishing the Wind: Where should wind farms be sited, and who should decide? <u>https://www.learngala.com/cases/farming-and-</u><u>fishing-the-wind/</u> -- read Part 1, sections 1-5 of the case study.
- Irvin, R. A., & Stansbury, J. (2004). Citizen participation in decision making: is it worth the effort? *Public Administration Review*, 64(1), 55-65.

<u>Activity:</u> Read the wind farm case study by McKenny *et al.* closely and be prepared for an inclass participatory decision-making simulation. Details will be posted on Canvas.

Week 4

Session 4.1 (Tu 1/30) — Inequities in rule-making (L/D)

Whose interests are represented in rule-making? How do interest groups gain more power in rule-making? What are strategies to increase equity in rule-making?

- Daley, D. M., & Reames, T. G. (2015). Public Participation and Environmental Justice: Access to Federal Decision Making. In *Failed Promises: Evaluating the Federal Government's Response to Environmental Justice*, D. Konisky, Ed. pp. 143-172.
- Johnson, M. F., Sveinsdottir, A. G., & Guske, E. L. (2021). The Dakota Access Pipeline in Illinois: Participation, power, and institutional design in United States critical energy infrastructure governance. Energy Research & Social Science, 73, 101908.

Optional:

Andersson, K., & Agrawal, A. (2011). Inequalities, institutions, and forest commons. *Global Environmental Change*, *21*(3), 866–875. <u>https://doi.org/10.1016/j.gloenvcha.2011.03.004</u>

Discussion prompt:

Both readings point to the limitations of federal public participation processes in ensuring environmental justice. In your view, what institutional factors caused these limitations?

Session 4.2 (Th 2/1) – Consequences of Institutions (L/D)

Do institutions have consequences of their own, or do they merely reflect the existing power dynamics and conflicts between social actors? Are institutions welfare-maximizing or distributional (i.e., they create winners and losers), or both?

- Knight, J. (1992). Institutions and social conflict. Cambridge University Press., Chapter 2. (skim pp. 27-37)
- Mahdavi, Paasha. 2020. "Institutions and the 'Resource Curse': Evidence From Cases of Oil-Related Bribery." *Comparative Political Studies*. 53(1): 3–39.

Optional:

Dell, M. (2010). The persistent effects of Peru's mining mita. Econometrica, 78(6), 1863-1903.

Discussion prompt:

Knight (1992) argues that "institutional rules are created by rational actors whose choice is motivated by self-interest". Do you agree? Relatedly, do you think that institutions are merely a reflection of existing power asymmetries and bargaining, or can they have an effect of their own, as Mahdavi (2020) suggests?

Mini-project 2: write a 2-3 page memo identifying distributional consequences of an environmental institution. **Due Tuesday 2/6 at 5 pm.**

UNIT 3: ENFORCEMENT

Week 5

Session 5.1 (Tu 2/6) – Strategy of enforcement (D/L)

When will the threat of penalties and fines bring potential violators of rules into compliance? When is it optimal to enforce given the costs involved?

- Robinson, E. J., Kumar, A. M., & Albers, H. J. (2010). Protecting developing countries' forests: enforcement in theory and practice. *Journal of Natural Resources Policy Research*, 2(1), 25-38.
- Blundell, W., Gowrisankaran, G., & Langer, A. (2020). Escalation of Scrutiny: The Gains from Dynamic Enforcement of Environmental Regulations. *American Economic Review*, *110*(8), 2558–2585.

Optional:

- Assunção, J., & Rocha, R. (2019). Getting greener by going black: The effect of blacklisting municipalities on Amazon deforestation. *Environment and Development Economics*, 24(2), 115–137.
- Milmanda, B. F., & Garay, C. (2020). A Multilevel Approach to Enforcement: Forest Protection in the Argentine Chaco. In D. M. Brinks, S. Levitsky, & M. V. Murillo (Eds.), *The Politics of Institutional Weakness in Latin America* (1st ed., pp. 183–207). Cambridge University Press.

Discussion prompt:

Based on what you have learned from the readings as well as your own experience, what factors should be considered when choosing an enforcement strategy?

Session 5.2 (Th 2/8) – Social enforcement (D)

Under what conditions do social norms and pressures offer a way to ensure compliance with environmental rules?

- Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going green to be seen: status, reputation, and conspicuous conservation. *Journal of Personality and Social Psychology* 98(3), 392-404.
- Allcott, H., & Rogers, T. (2014). The short-run and long-run effects of behavioral interventions: Experimental evidence from energy conservation. *American Economic Review*, 104(10), 3003-3037.

Discussion prompt:

How useful do you think behavioral interventions are in nudging pro-environmental behavior? What are their limitations?

Week 6

Session 6.1 (Tu 2/13) – Market-based enforcement (A)

Under what conditions can markets enforce compliance with environmental rules? Does market-based enforcement substitute for public enforcement?

Eberhard, E., Oliphant, E., & Simon, A. The Cost of Sustainable Palm Oil: Should an Indonesian smallholder farmer get RSPO certified? Michigan Sustainability Cases. <u>https://www.learngala.com/cases/palm-oil-rspo</u>

Optional:

Carlson, K. M., Heilmayr, R., Gibbs, H. K., Noojipady, P., Burns, D. N., Morton, D. C., ... & Kremen, C. (2018). Effect of oil palm sustainability certification on deforestation and fire in Indonesia. *Proceedings of the National Academy of Sciences*, *115*(1), 121-126.

Class activity: Town Hall Meeting on Indonesian Palm Oil, where smallholders and large companies decide whether to become RSPO-certified. More details will be posted on Canvas.

UNIT 4: MONITORING

Session 6.2 (Th 2/15) – Strategy of Monitoring Compliance (L)

How will potential violators of rules respond to efforts to monitor their actions? How can enforcing agents be strategic in their monitoring efforts in response given the costs involved?

- Zou, E. Y. (2021). Unwatched pollution: The effect of intermittent monitoring on air quality. American Economic Review, 111(7), 2101-2126.
- Anderson, S. E., Buntaine, M. T., Liu, M., & Zhang, B. Non-Governmental Monitoring of Local Governments Increases Compliance with Central Mandates: A National-Scale Field Experiment in China. *American Journal of Political Science* 63(3), 626-643.

Discussion prompt:

What is a "principal-agent problem"? In what ways does this problem show up in the cases of environmental monitoring in this week's reading?

Mini-project #3 (Monitoring Brief): Write a 2-page memo to a policymaker of interest suggesting ways to improve monitoring of an environmental problem. Poster presentation of draft proposal on Thursday 2/22, final memo due on Thursday 2/29 at 5 pm.

Week 7

Session 7.1 (Tu 2/20) – Citizen Monitoring (L)

Under what conditions does calling on citizens to monitor potential violators of environmental rules lead to better outcomes?

- Slough, T., Kopas, J., & Urpelainen, J. (2021). Satellite-based deforestation alerts with training and incentives for patrolling facilitate community monitoring in the Peruvian Amazon. Proceedings of the National Academy of Sciences, 118(29), e2015171118.
- Buntaine, M., Greenstone, M., He, G., Liu, M., Wang, S., & Zhang, B. (2022). Does the Squeaky Wheel Get More Grease? The Direct and Indirect Effects of Citizen Participation on Environmental Governance in China (No. w30539). National Bureau of Economic Research.

Optional:

Slough, Tara et al. 2021. "Adoption of Community Monitoring Improves Common Pool Resource Management across Contexts." *Proceedings of the National Academy of Sciences 118*(29)

Discussion prompt:

Think of an environmental issue of your interest where effective monitoring is difficult. Can citizen monitoring play a role in addressing the monitoring challenges?

Session 7.2 (Th 2/22)– Innovations in Monitoring (Poster Session)

Background reading for some ideas:

Assunção, J., Gandour, C., & Rocha, R. (2017). DETERring Deforestation in the Brazilian Amazon: Environmental Monitoring and Law Enforcement. *Climate Policy Initiative Report, PUC-Rio,* Available at: <u>https://climatepolicyinitiative.org/wp-</u> <u>content/uploads/2013/05/DETERring-Deforestation-in-the-Brazilian-Amazon-</u> <u>Environmental-Monitoring-and-Law-Enforcement-Technical-Paper_Feb2017.pdf</u>

- Camalan, S., Cui, K., Pauca, V. P., Alqahtani, S., Silman, M., Chan, R., Plemmons, R. J., Dethier, E. N., Fernandez, L. E., & Lutz, D. A. (2022). Change Detection of Amazonian Alluvial Gold Mining Using Deep Learning and Sentinel-2 Imagery. Remote Sensing, 14(7), Article 7.
- Greenstone, M., He, G., Jia, R., & Liu, T. (2022). Can Technology Solve the Principal-Agent Problem? Evidence from China's War on Air Pollution. *American Economic Review: Insights*, 4(1), 54-70.
- Hino, M., Benami, E., & Brooks, N. (2018). Machine learning for environmental monitoring. *Nature Sustainability*, *1*(10), 583.
- INECE. 2015. Special Report on Next Generation Compliance. Available at: <u>https://inece.org/assets/Publications/5748af16cf1d4_SpecialReportOnNextGenerationCompliance_Full.pdf</u>
- Lee, J., Brooks, N. R., Tajwar, F., Burke, M., Ermon, S., Lobell, D. B., ... & Luby, S. P. (2021). Scalable deep learning to identify brick kilns and aid regulatory capacity. *Proceedings* of the National Academy of Sciences, 118(17), e2018863118.
- McDonald, G. G., Costello, C., Bone, J., Cabral, R. B., Farabee, V., Hochberg, T., ... & Zahn,
 O. (2021). Satellites can reveal global extent of forced labor in the world's fishing fleet.
 Proceedings of the National Academy of Sciences, 118(3), e2016238117.
- Miller, N. A., Roan, A., Hochberg, T., Amos, J., & Kroodsma, D. A. (2018). Identifying global patterns of transshipment behavior. *Frontiers in Marine Science*, *5*, 240.
- Moffette, F., Alix-Garcia, J., Shea, K., & Pickens, A. H. (2021). The impact of near-real-time deforestation alerts across the tropics. Nature Climate Change, 11(2), Article 2.
- Mulero-Pázmány, M., Stolper, R., Van Essen, L. D., Negro, J. J., & Sassen, T. (2014). Remotely piloted aircraft systems as a rhinoceros anti-poaching tool in Africa. *PloS one*, *9*(1), e83873.
- Stokstad, E. (2014). Will fracking put too much fizz in your water? *Science*, *344*(6191), 1468-1471.
- Zu Ermgassen, E. K. H. J., Ayre, B., Godar, J., Bastos Lima, M. G., Bauch, S., Garrett, R.,
 Green, J., Lathuillière, M. J., Löfgren, P., MacFarquhar, C., Meyfroidt, P., Suavet, C.,
 West, C., & Gardner, T. (2020). Using supply chain data to monitor zero deforestation
 commitments: An assessment of progress in the Brazilian soy sector. Environmental
 Research Letters, 15(3), 035003.

Week 8

Session 8.1 (Tu 2/27) Guest lecture: Dr. Kathryn Baragwanath (Potential topic: Environmental institutions in Latin America)

Readings to be announced closer to the date.

Baragwanath, K., & Bayi, E. (2020). Collective property rights reduce deforestation in the Brazilian Amazon. *Proceedings of the National Academy of Sciences, 117*(34), 20495-20502.

- Baragwanath, K., Bayi, E., & Shinde, N. (2023). Collective property rights lead to secondary forest growth in the Brazilian Amazon. *Proceedings of the National Academy of Sciences, 12*0(22), e2221346120.
- Does the Dismantling of Environmental Institutions Affect Deforestation Inside Conservation Units? Evidence from the Brazilian Amazon

UNIT 5. BUILDING INSTITUTIONS

Session 8.2 (Th 2/29). Institutional failures (L&D)

What causes institutional failures?

Scott, J. C. (1998). Seeing like a state: How certain schemes to improve the human condition have failed. Yale University Press. Introduction & Chapter 1

Optional:

- Acheson, J. M. (2006). Institutional failure in resource management. *Annu. Rev. Anthropol.*, 35, 117-134.
- He, Y., Baldiviezo, J. P., Agrawal, A., Candaguira, V., & Perfecto, I. (2019). Guardians of the Forests: How Should an Indigenous Community in Eastern Bolivia Defend Their Land and Forests under Increasing Political and Economic Pressures? *Case Studies in the Environment*.
- Rosen, A. M. (2015). The Wrong Solution at the Right Time: The Failure of the Kyoto Protocol on Climate Change. Politics & Policy, 43(1), 30–58.

Discussion prompt:

Scott (1998) illustrated how state-led institutional reforms often failed to improve society and the environment. Can you think of contemporary examples that align with his arguments?

Week 9

Session 9.1 (Tu 3/5) The nature of institutional change (L)

How does institutional change happen? How can we navigate the tension between the slowmoving nature of many institutions and the urgency of environmental issues?

Roland, G. (2004). Understanding institutional change: fast-moving and slow-moving institutions. *Studies in Comparative International Development*, *38*(4), 109-131.
Dubash, N. K., Pillai, A. V., Flachsland, C., Harrison, K., Hochstetler, K., Lockwood, M., ... & Tyler, E. (2021). National climate institutions complement targets and policies. Science, *374*(6568), 690-693.

Optional:

Mildenberger, M. (2021). The development of climate institutions in the United States. Environmental Politics, 30(sup1), 71-92.

Discussion prompt:

One common theme between the two articles of today is that the development and change of political institutions need to be congruent with its context, including norms, culture, and values; there is no "optimal" institutional solution. What does this mean for those seeking to address sustainability issues such as climate change? Do you think institutions are largely shaped by their context, or is there space for institutional reform?

Mini-Project #4: Create a 4-5 page proposal for building and/or reforming an institution to manage an environmental problem. Address rule-making, monitoring, and enforcement, including trade-offs between these components of institution building. Present draft proposal on Thursday 3/14; submit final proposal on Thursday 3/21.

Session 9.2 (Th 3/7) – Opportunities for institutional reform (L/D)

When do institutions change? When is the change fast and when is it slow? What are ways that advocates can prompt institutional change?

Lemos, M. C., & Agrawal, A. (2006). Environmental governance. *Annu. Rev. Environ. Resour.*, *31*, 297-325.

Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., ... & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, *4*6, 30-39.

Optional:

Rose, D. C., Mukherjee, N., Simmons, B. I., Tew, E. R., Robertson, R. J., Vadrot, A. B., ... & Sutherland, W. J. (2017). Policy windows for the environment: tips for improving the uptake of scientific knowledge. *Environmental Science & Policy*.

Discussion prompt:

Readings from previous weeks (especially Scott and Roland) cautioned us against drastic institutional changes and instead advocated for a gradual, experimental approach. Yet, the urgency of environmental issues seems to motivate many practitioners to call for rapid institutional reforms. What is your view on this tension?

Week 10

Session 10.1 (Tu 3/12) – Development assistance and government reform (L/D) When can external assistance be used to build stronger environmental institutions?

- Buntaine, M. T., Parks, B. C., & Buch, B. P. (2017). Aiming at the Wrong Targets: The Domestic Consequences of International Efforts to Build Institutions. *International Studies Quarterly*, 61(2), 471-488.
- Porzecanski, A. L., Sterling, E. J., Copsey, J. A., Appleton, M. R., Barborak, J. R., Bruyere, B. L., ... & Valdés-Velásquez, A. (2022). A systems framework for planning and evaluating capacity development in conservation: recommendations for practitioners. *Oryx*, 56(5), 671-680.

Optional:

Maxton-Lee, B. (2020). Forest Conservation and Sustainability in Indonesia: A Political Economy Study of International Governance Failure. Routledge. Introduction.

Discussion prompt:

What are some of the unique challenges for international organizations and NGOs to build local institutions?

Session 10.2 (Th 3/14) Institutional proposal presentations and metacognition (A)

Groups will present their progress on the last institutional profile to the class. In addition, we will do a meta-cognition activity to map what we have learned throughout the class.