# Supplementary material

A diagnostic framework for biodiversity conservation institutions

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Supplementary Table: Diagnostic questions for applying the framework

Framework Component	Initial diagnostic questions
Problem and players	
Framing: Understanding the biodiversity conservation agenda, nature of the problem, and the range of solutions.	• How is biodiversity conservation currently approached in this landscape and at what scale? • What (and who) is contributing to biodiversity decline? Who can help solve it? • What solutions have been employed and how have they worked?
Culture and norms: Both influence behaviour by 'defining' what is proper and improper behaviour.	• How does organisational culture influence policy and its implementation? • What are the norms influencing decisions to participate (or not participate) in biodiversity conservation?
Politics	
Interplay: Institutions interact across governance levels and geographic scales. Biodiversity institutions also interact with other institutions (e.g. economics, agriculture).	• How do approaches to conserving biodiversity influence each other? • How do the different levels of governance interact? • How do politics influence practice at each level? • How do institutions in other areas interact with biodiversity conservation?
Power and authority: Institutions empower individuals and organisations to act and cooperate. Authority to conserve biodiversity provides an important safety net.	• How is power distributed between individuals and organisations? • Does sufficient authority exist to deal with key drivers and take action? Where does it exist? • Are roles and responsibilities clearly delineated?
Practices – competence	
Cooperation: Biodiversity attributes and threats occur across properties, tenures and jurisdictions, requiring cooperation between actors and across scales and governance levels.	• What is the current level of cooperation? • Are there particular areas or objectives requiring greater cooperation? • What conditions are hindering efforts to cooperate?

Administrative competence: Knowledge, capability, and the commensurate resources and competencies are necessary to achieving conservation objectives.	• Do individuals and organisations have the necessary human resources? (e.g. skills, knowledge, quantity and quality of employees) • Do individuals and organisations have the necessary financial resources? • How well do policies on paper match the problem of biodiversity conservation in practice in this landscape?
Learning: A process of adjusting goals and approaches in response to experience and information. It can enable change and sustain practices.	• How do individuals and organisations get feedback on current approaches? (e.g. monitoring practices, sources of information) • Do individuals and organisations reflect on current practices, and adjust in response?
Practices – capacity	
Leadership and entrepreneurship: Leadership can be structural, entrepreneurial and intellectual. It can come from any level of governance.	• Who is taking the lead on biodiversity conservation, and how are they influencing outcomes and practices? • Are there individuals and organisations adopting innovative approaches to policy or management? • Are there factors constraining leadership capacity?
Buffering: Institutions must recognize thresholds and disturbances and respond to buffer ecosystems. Organizations need to buffer against changes in external environments to achieve objectives over the long term.	• Are there multiple institutions and organisations addressing biodiversity conservation? • Are there multiple approaches to addressing biodiversity decline in this landscape, or are most resources devoted to only one or two? • How do organisations cope with external factors, like political influence and budget cuts?
Self-organizing: Self-organizing networks can build institutional memory, fill gaps in formal responsibilities, and provide capacity.	• Are individuals and organisations empowered to self-organise and act locally? • Are there informal and formal networks for sharing information and making decisions?
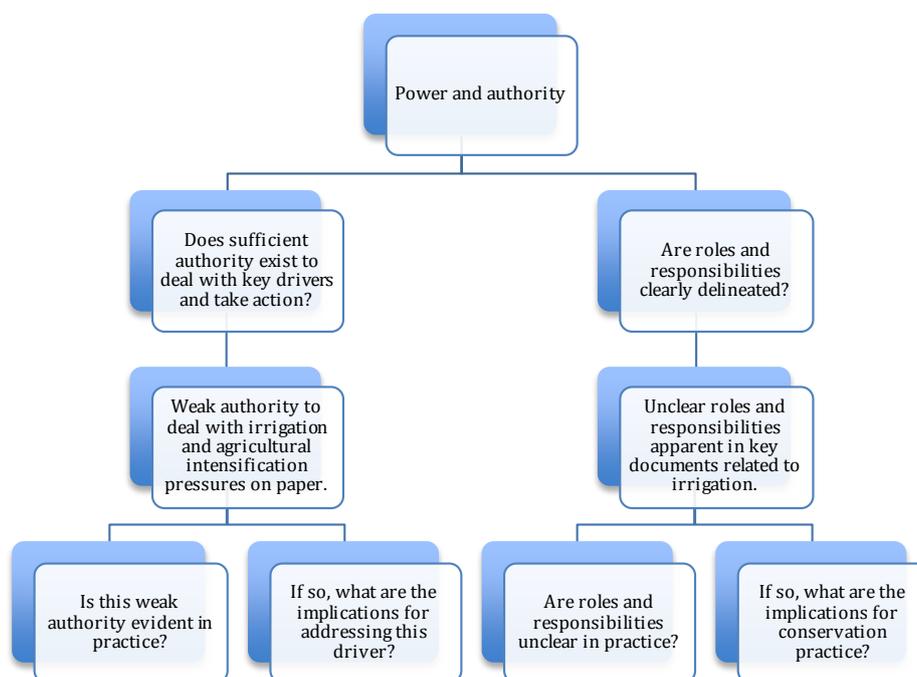
Supplementary figure: Example of interaction between steps 3 and 4 (Clement *et al.* 2015)

Reference

Clement, S., Moore, S., Lockwood, M., and Mitchell, M. (2015). Using insights from pragmatism to develop reforms that strengthen institutional competence for conserving biodiversity. *Policy Sciences* in press, 1–27. doi:10.1007/s11077-015-9222-0