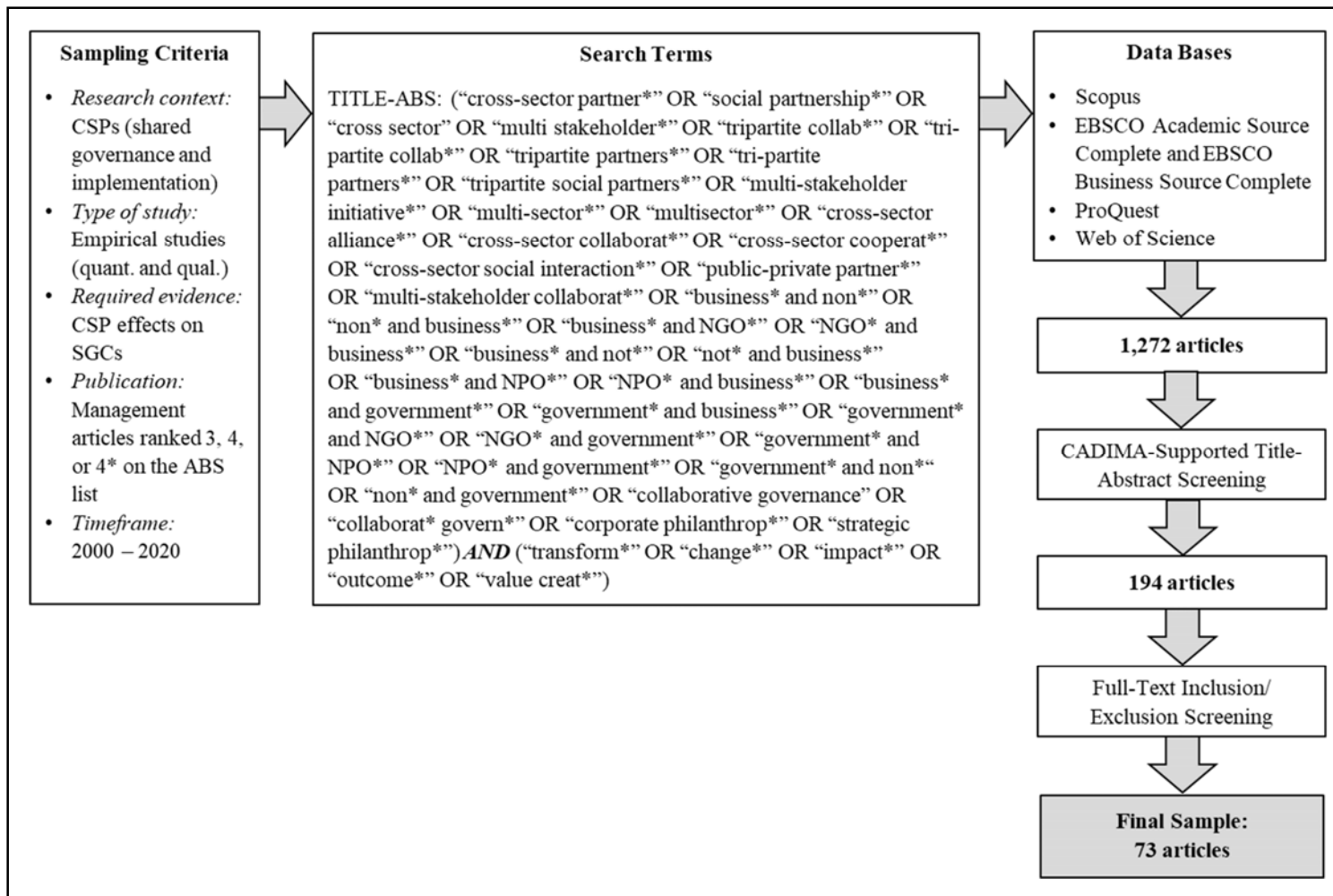


**Supporting Information for “Cross-Sector Partnerships to Address Societal Grand Challenges:
Systematizing Differences in Scholarly Analysis”**

Appendix 1. Article Selection Process



Appendix 2. Overview of Articles Included in Our Review (n=73)

	Authors	Year	Title	Journal, Volume, Page Numbers
1.	Acosta, A. M.; Haddad, L.	2014	The politics of success in the fight against malnutrition in Peru.	Food Policy, 44, 26-35
2.	Almog-Bar, M.; Schmid, H.	2018	Cross-sector partnerships in human services: Insights and organizational dilemmas.	Nonprofit and Voluntary Sector Quarterly, 47, 119S-138S
3.	Alonso, J. M.; Andrews, R.	2019	Governance by targets and the performance of cross-sector partnerships: Do partner diversity and partnership capabilities matter?	Strategic Management Journal, 40, 556-579
4.	Alvarez, S. M.; Alvarez, J. F.	2018	Leadership development as a driver of equity and inclusion.	Work and Occupations, 45, 501–528
5.	Arts, B.; de Koning, J.	2017	Community forest management: An assessment and explanation of its performance through QCA.	World Development, 96, 315-325
6.	Bacon, N.; Samuel, P.	2017	Social partnership and political devolution in the National Health Service: Emergence, operation and outcomes.	Work Employment and Society, 31, 123-141
7.	Biddle, J. C.; Koontz, T. M.	2014	Goal specificity: A proxy measure for improvements in environmental outcomes in collaborative governance.	Journal of Environmental Management, 145, 268-276
8.	Bitzer, V.; Francken, M.; Glasbergen, P.	2008	Intersectoral partnerships for a sustainable coffee chain: Really addressing sustainability or just picking (coffee) cherries?	Global Environmental Change, 18, 271-284
9.	Bitzer, V.; Glasbergen, P.	2010	Partnerships for sustainable change in cotton: An institutional analysis of African cases	Journal of Business Ethics, 93, 223-240
10.	Brisbois, M. C.; Morris, M.; de Loe, R.	2019	Augmenting the IAD framework to reveal power in collaborative governance - An illustrative application to resource industry dominated processes.	World Development, 120, 159-168
11.	Brogaard, L.	2017	The impact of innovation training on successful outcomes in public–private partnerships.	Public Management Review, 19, 1184-1205
12.	Burch, S.; Schroeder, H.; Rayner, S.; Wilson, J.	2013	Novel multisector networks and entrepreneurship: The role of small businesses in the multilevel governance of climate change.	Environment and Planning C: Government and Policy, 31, 822-840
13.	Chorianopoulos, I.; Tselepi, N.	2019	Austerity urbanism: Rescaling and collaborative governance policies in Athens.	European Urban and Regional Studies, 26, 80-96

14.	Clarke, A.; Fuller, M.	2010	Collaborative strategic management: Strategy formulation and implementation by multi-organizational cross-sector social partnerships.	Journal of Business Ethics, 94, 85-101
15.	Cornelius, N.; Wallace, J.	2010	Cross-sector partnerships: City regeneration and social justice.	Journal of Business Ethics, 94, 71-84
16.	Crispeels, T.; Willems, J.; Scheerlinck, I.	2018	Public-private collaborations in drug development: Boosting innovation or alleviating risk?	Public Management Review, 20, 273-292
17.	Davies, A. L.; White, R. M.	2012	Collaboration in natural resource governance: Reconciling stakeholder expectations in deer management in Scotland.	Journal of Environmental Management, 112, 160-169
18.	de Wit, J.; Berner, E.	2009	Progressive patronage? Municipalities, NGOs, CBOs and the limits to slum dwellers' empowerment.	Development and Change, 40, 927-947
19.	Edge, S.; Meyer, S. B.	2019	Pursuing dignified food security through novel collaborative governance initiatives: Perceived benefits, tensions and lessons learned.	Social Science and Medicine, 232, 77-85
20.	Forsyth, T.	2007	Promoting the "development dividend" of climate technology transfer: Can cross-sector partnerships help?	World Development, 35, 1684-1698
21.	Fraser, E. D. G.; Dougill, A. J.; Mabee, W. E.; Reed, M.; McAlpine, P.	2006	Bottom up and top down: Analysis of participatory processes for sustainability indicator identification as a pathway to community empowerment and sustainable environmental management.	Journal of Environmental Management, 78, 114-127
22.	Gazley, B.	2010	Linking collaborative capacity to performance measurement in government-nonprofit partnerships.	Nonprofit and Voluntary Sector Quarterly, 39, 653-673
23.	Gebre-Mariam, M.; Bygstad, B.	2019	Digitalization mechanisms of health management information systems in developing countries.	Information and Organization, 29, 1-22
24.	George, G.; Rao-Nicholson, R.; Corbishley, C.; Bansal, R.	2015	Institutional entrepreneurship, governance, and poverty: Insights from emergency medical response services in India.	Asia Pacific Journal of Management, 32, 39-65
25.	Gerlak, A. K.; Heikkila, T.	2011	Building a theory of learning in collaboratives: Evidence from the Everglades restoration program.	Journal of Public Administration Research and Theory, 21, 619-644

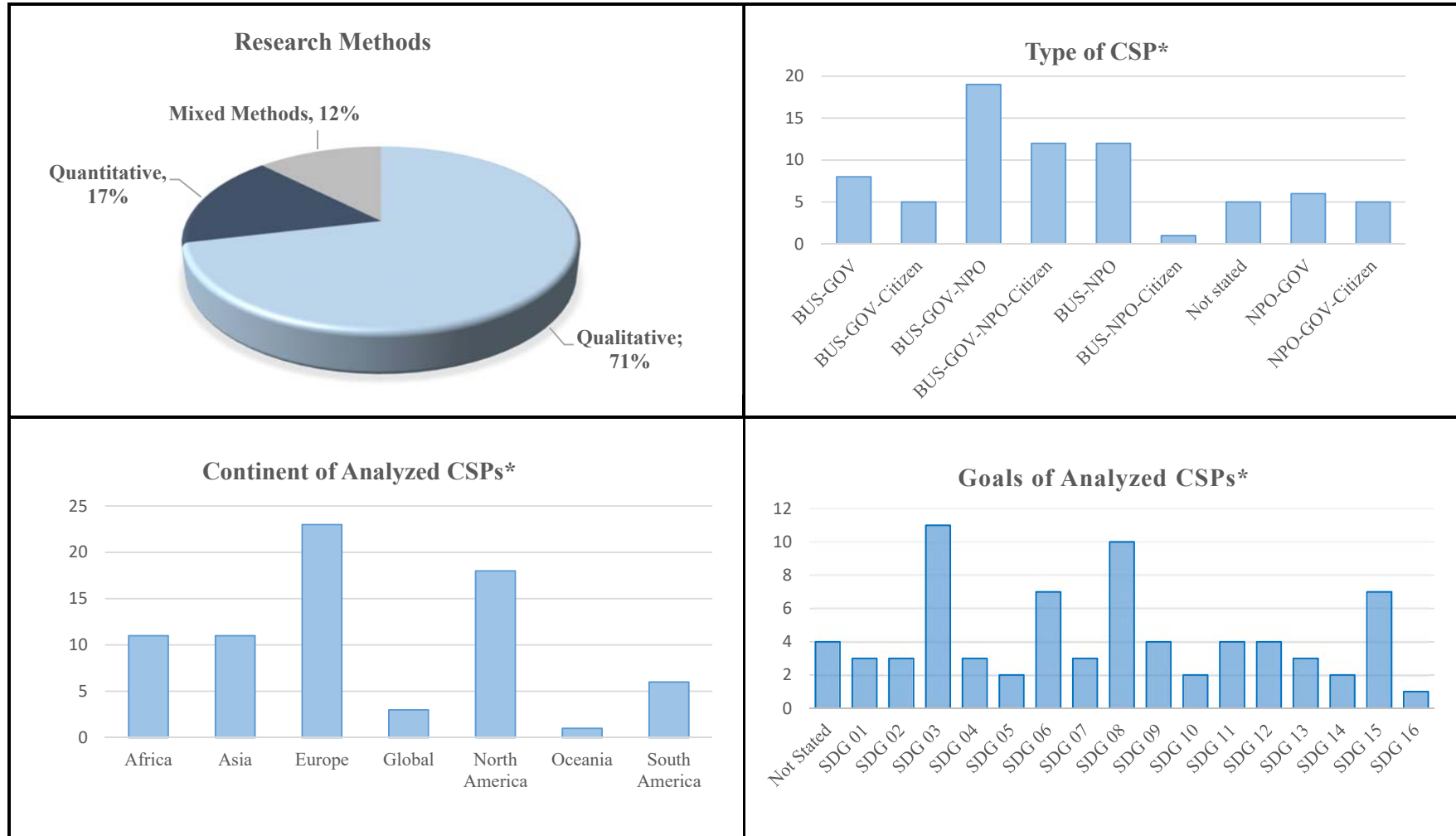
26.	Gillett, A.; Loader, K.; Doherty, B.; Scott, J. M.	2019	An examination of tensions in a hybrid collaboration: A longitudinal study of an empty homes project.	Journal of Business Ethics, 157, 949-967
27.	Godenhjelm, S.; Johanson, J. E.	2018	The effect of stakeholder inclusion on public sector project innovation.	International Review of Administrative Sciences, 84, 42-62
28.	Guarneros-Meza, V.; Downe, J.; Martin, S.	2018	Defining, achieving, and evaluating collaborative outcomes: a theory of change approach.	Public Management Review, 20, 1562-1580
29.	Herrera, M. E. B.	2016	Innovation for impact: Business innovation for inclusive growth.	Journal of Business Research, 69, 1725-1730
30.	Hesse, A.; Kreutzer, K.; Diehl, M. R.	2019	Dynamics of institutional logics in a cross-sector social partnership: The case of refugee integration in Germany.	Journal of Business Ethics, 159, 679-704
31.	Idemudia, U.	2017	Environmental business-NGO partnerships in Nigeria: Issues and prospects.	Business Strategy and the Environment, 26, 265-276
32.	Isham, J.; Kähkönen, S.	2002	Institutional determinants of the impact of community-based water services: Evidence from Sri Lanka and India.	Economic Development and Cultural Change, 50, 667-691
33.	Kim, S.	2016	The workings of collaborative governance: Evaluating collaborative community-building initiatives in Korea.	Urban Studies, 53, 3547-3565
34.	Klitsie, E. J.; Ansari, S.; Volberda, H. W.	2018	Maintenance of cross-sector partnerships: The role of frames in sustained collaboration.	Journal of Business Ethics, 150, 401-423
35.	Knai, C.; Petticrew, M.; Durand, M. A.; Eastmure, E.; James, L.; Mehrotra, A.; Scott, C.; Mays, N.	2015	Has a public-private partnership resulted in action on healthier diets in England? An analysis of the Public Health Responsibility Deal food pledges.	Food Policy, 54, 1-10
36.	Laeis, G. C. M.; Lemke, S.	2016	Social entrepreneurship in tourism: Applying sustainable livelihoods approaches.	International Journal of Contemporary Hospitality Management, 28, 1076-1093
37.	Lin, H.	2019	Government-business partnerships for radical eco-innovation.	Business and Society, 58, 533-573
38.	Lund-Thomsen, P.	2009	Assessing the impact of public-private partnerships in the Global South: The case of the Kasur Tanneries pollution control project.	Journal of Business Ethics, 90, 57-78
39.	May, P. J.; Winter, S. C.	2007	Collaborative service arrangements - Patterns, bases, and perceived consequences.	Public Management Review, 9, 479-502

40.	Mironska, D.; Zaborek, P.	2019	NGO-business collaboration: A comparison of organizational, social, and reputation value from the NGO perspective in Poland.	Nonprofit and Voluntary Sector Quarterly, 48, 532-551
41.	Muller, C.; Vermeulen, W. J. V.; Glasbergen, P.	2012	Pushing or sharing as value-driven strategies for societal change in global supply chains: Two case studies in the British-South African fresh fruit supply chain.	Business Strategy and the Environment, 21, 127-140
42.	Murphy, M.; Arenas, D.; Batista J.M.	2015	Value creation in cross-sector collaborations: The roles of experience and alignment.	Journal of Business Ethics, 130, 145-162
43.	Mustalahti, I.; Rakotonarivo, O. S.	2014	REDD+ and empowered deliberative democracy: Learning from Tanzania.	World Development, 59, 199-211
44.	Ostovar, A. L.	2019	Investing upstream: Watershed protection in Piura, Peru.	Environmental Science and Policy, 96, 9-17
45.	Pavlovich, K.; Akoorie, M.	2010	Innovation, sustainability and regional development: The Nelson/Marlborough seafood cluster, New Zealand.	Business Strategy and the Environment, 19, 377-386
46.	Peterman, A.; Kourula, A.; Levitt, R.	2014	Balancing act: Government roles in an energy conservation network.	Research Policy, 43(6), 1067-1082
47.	Petrick, M.; Gramzow, A.	2012	Harnessing communities, markets and the state for public goods provision: Evidence from post-socialist rural Poland.	World Development, 40, 2342-2354
48.	Powell, E. E.; Hamann, R.; Bitzer, V.; Baker, T.	2018	Bringing the elephant into the room? Enacting conflict in collective prosocial organizing.	Journal of Business Venturing, 33, 623-642
49.	Prügl, E.; True, J.	2014	Equality means business? Governing gender through transnational public-private partnerships.	Review of International Political Economy, 21, 1137-1169
50.	Rao-Nicholson, R.; Vorley, T.; Khan, Z.	2017	Social innovation in emerging economies: A national systems of innovation based approach.	Technological Forecasting and Social Change, 121, 228-237
51.	Reficco, E.; Marquez, P.	2012	Inclusive networks for building BOP markets.	Business and Society, 51, 512-556
52.	Reypens, C.; Lievens, A.; Blazevic, V.	2016	Leveraging value in multi-stakeholder innovation networks: A process framework for value co-creation and capture.	Industrial Marketing Management, 56, 40-50
53.	Roberts, D. J.; Siemiatycki, M.	2015	Fostering meaningful partnerships in public-private partnerships: innovations in partnership design and process management to create value.	Environment and Planning C: Government and Policy, 33, 780-793

54.	Rodriguez, J. A.; Thomsen, C. G.; Arenas, D.; Pagell, M.	2016	NGOs' initiatives to enhance social sustainability in the supply chain: Poverty alleviation through supplier development programs.	Journal of Supply Chain Management, 52, 83-108
55.	Rogers, E.; Weber, E. P.	2010	Thinking harder about outcomes for collaborative governance arrangements.	American Review of Public Administration, 40, 546-567
56.	Roth, A. P.; de Loë, R. C.	2017	Incorporating outcomes from collaborative processes into government decision making: A case study from low water response planning in Ontario, Canada.	Ecological Economics, 132, 169-178
57.	Sakarya, S.; Bodur, M.; Yildirim- Öktem, O.; Selekler-Göksen, N.	2012	Social alliances: Business and social enterprise collaboration for social transformation.	Journal of Business Research, 65, 1710-1720
58.	Scodanibbio, L.	2011	Opening a policy window for organisational change and full-cost accounting: The creation of BC Hydro's water use planning program.	Ecological Economics, 70, 1006-1015
59.	Scott, T.	2015	Does collaboration make any difference? Linking collaborative governance to environmental outcomes.	Journal of Policy Analysis and Management, 34, 537-566
60.	Sunday, S. M.; Wilson-Prangley, A.	2018	Intermediary capabilities in the context of challenging state dynamics.	Journal of Business Ethics, 152, 667-682
61.	Steijn, B.; Klijn, E. H.; Edelenbos, J.	2011	Public private partnerships: Added value by organizational form or management?	Public Administration, 89, 1235-1252
62.	Steyaert, P.; Barzman, M.; Billaud, J. P.; Brives, H.; Hubert, B.; Ollivier, G.; Roche, B.	2007	The role of knowledge and research in facilitating social learning among stakeholders in natural resources management in the French Atlantic coastal wetlands.	Environmental Science and Policy, 10, 537-550
63.	Szulecki, K.; Pattberg, P.; Biermann, F.	2011	Explaining variation in the effectiveness of transnational energy partnerships.	Governance-an International Journal of Policy Administration and Institutions, 24, 713-736
64.	Thorpe, J.	2018	Procedural justice in value chains through public-private partnerships.	World Development, 103, 162-175
65.	Thümler, E.	2011	Foundations, schools, and the state school improvement partnerships in Germany and the United States as legitimacy-generating arrangements.	Public Management Review, 13, 1095-1116

66.	Trencher, G.; Bai, X.; Evans, J.; McCormick, K.; Yarime, M.	2014	University partnerships for co-designing and co-producing urban sustainability.	Global Environmental Change, 28, 153-165
67.	Trujillo, D.	2018	Multiparty alliances and systemic change: The role of beneficiaries and their capacity for collective action.	Journal of Business Ethics, 150, 425-449
68.	Vestergaard, A.; Murphy, L.; Morsing, M.; Langevang, T.	2020	Cross-sector partnerships as capitalism's new development agents: Reconciving impact as empowerment.	Business and Society, 59, 1339-1376
69.	Vogl, A. L.; Bryant, B. P.; Hunink, J. E.; Wolny, S.; Apse, C.; Droogers, P.	2017	Valuing investments in sustainable land management in the Upper Tana River basin, Kenya.	Journal of Environmental Management, 195, 78-91
70.	Waardenburg, M.; Groenleer, M.; de Jong, J.; Keijser, B.	2020	Paradoxes of collaborative governance: investigating the real-life dynamics of multi-agency collaborations using a quasi-experimental action-research approach.	Public Management Review, 22, 386-407
71.	Wang, M. L.	2012	Managing HIV/AIDS: Yunnan's government-driven, multi-sector Partnership Model.	Management and Organization Review, 8, 535-557
72.	Weber, E. P.	2009	Explaining institutional change in tough cases of collaboration: "Ideas" in the Blackfoot watershed.	Public Administration Review, 69, 314-327
73.	Woodson, T. S.	2016	Public private partnerships and emerging technologies: A look at nanomedicine for diseases of poverty.	Research Policy, 45, 1410-1418

Appendix 3. Sample Illustration



*Based on the first analyzed CSP in each article.

Appendix 4. Illustrative Data Excerpts

4.1 Examples of SGC-related Problem Framing

	Example 1	Example 2	Example 3
	Diagnostic SGC Framing		
	<i>Example: Fraser et al. (2006, p. 118)</i>	<i>Example: Muller et al. (2012, p. 127-128)</i>	<i>Example: George et al. (2015, p. 41-42)</i>
Problematizing: Social and/or environmental SGC features	“Since independence in 1966, the Government of Botswana has privatised large areas of communal grazing land in the Kalahari by fencing off land for use by commercial cattle producers. Many environmental assessments show that this [...] has actually increased degradation problems on both commercial ranches [...] and in the remaining communal lands [...]”	“Agriculture in South Africa has long been associated with human rights violations and land expropriation [...], exploitation of farm workers and unsustainable social practices.”	“In spite of that head start, Indian emergency services have failed to keep up with global standards : It is estimated that from being the ninth leading cause of death, trauma will eventually move up to third position by 2020 [...]. Worldwide, 50 million people were injured each year and it was expected to grow by 65 % over the next 20 years [...]”
SGC info: Detailed SGC description, mentioning of a focal “solution”	“There is a real concern that a positive feedback cycle exists whereby privatisation leads to more boreholes, which leads to bush encroachment, leading to a loss of productive rangeland for cattle, leading landowners to drill additional boreholes in remaining grass dominant areas that then rapidly become bush encroached. This is especially troubling since [...] a dryland’s ability to support livestock depends on maintaining a diverse and heterogeneous landscape in terms of fodder resources [...] and that bush encroachment can only be checked by fire events [...]”	“...relates to a lack of education and skills of a vast number of citizens, contributing to the current unemployment figures.” →Causing an excess offer of workers and this way enabling exploitation of farm works and unstainable social practices . “Official statistics measure unemployment according to the narrow definition, which can present a skewed perception of the reality, especially in the light of other social problems [...]”	“India’s economic growth has created some of the best private health facilities but they have not traditionally been accessible to a majority of the low-income population . Accident victims frequently fail to receive timely medical care following an accident, whilst broader problems such as access to clean drinking water and sustained access to improved sanitation also result in diseases and emergencies unique to the Indian context.”
	Prognostic SGC Framing		
	<i>Example: Forsyth (2007, p. 1684; 1686)</i>	<i>Example: Godenhjelm and Johanson (2018, p. 43,44)</i>	<i>Example: Woodson (2016, p. 1410-1411)</i>
Problematizing: Challenges related to a focal SGC “solution”	“In recent years, negotiators about climate change policy have used the term, ‘ development dividend ’ to describe social and developmental benefits that accompany activities to reduce or sequester greenhouse gas emissions in developing countries. The term was inspired by concerns that some low-cost approaches to climate change mitigation in developing countries might fail to enhance, or even detract from, other aspects of sustainable development. One important possible application of the development dividend is in the transfer of technologies that can both reduce greenhouse gas emissions and contribute to local social and economic development. [...] But achieving the development	“ Innovation [in public policy service delivery process] represents a solution to welfare problems [...]. However, innovation in governance is ambiguous and requires an institutional environment that fosters learning and knowledge sharing [...]. A common notion is that knowledge is created when heterogeneous organizations or actors meet, create partnerships and share ideas. Thus, some see creative problem solving and collaboration as the cure for the alleged innovation deficit within the public sector [...]. Consequently,	“Despite the improvements in overall health, the advancements are not evenly distributed. Many medical discoveries only target diseases of the very rich and other medicines are too expensive for impoverished communities to purchase. [...] less than 10% of healthcare research and development (R&D) was on diseases that affect 90% of the world’s population [...]” “One new health technology that some scientists believe will revolutionized healthcare is nanotechnology . [...] However, nanotechnology, and other emerging technologies, only have viable futures if there is a market for them [...]. Yet, the market for Disease of Poverty (DoP) medicines is

dividend has been difficult for various reasons. First, [...]. Second, [...]. And third, [...].”

many public management reforms and programmes identify innovation as their primary goal [...].”

unclear because companies are unlikely to recoup their research expenses and make a profit on medicines for diseases that affect the poor [...].”

SGC info:
Detailed description of a SGC “solution”, short or missing SGC information

“The Marrakech Accords established an Adaptation Fund to help poor countries adapt to climate change, based on 2% of the value of certified emission reduction units under the Clean Development Mechanism.” p. 1690 “The theme of waste-to-energy was selected because it encompasses many dilemmas of climate technology transfer and the development dividend. **Waste is a growing health and planning problem in developing countries**, and is relevant to global climate change because it usually emits methane, which can also be harnessed and used as a renewable energy.”

“In public administration, problems usually **need to be solved by a wide audience** that extends beyond the resources controlled by any given organization [...].”

“In 1999, there was **substantial public outrage directed at pharmaceutical companies** because they refused to provide low-cost HIV medicines to victims in poor countries. [...]. Moreover, in 2000 the United Nations launched the Millennium Development Goals (MDGs) and increased the visibility of DoP. This **made the world community more responsive to the needs of the poor** and it put public pressure on countries to find solutions for these issues.”

4.2 Examples of SGC Interventions

	Example 1	Example 2	Example 3
	<i>Transformative SGC Intervention</i>		
	<i>Example: Gerlak and Heikkila (2011, p. 626-627)</i>	<i>Example: De Wit and Berner (2009, p. 936-937)</i>	<i>Example: Isham and Kähkönen (2002, p. 668, 673)</i>
Aim: Addresses factors underlying the SGC such as by enabling and/or empowering disadvantaged stakeholder groups	“The Everglades restoration program has become a network of multiple organizations that institutionalizes communications and joint decisions among various actors that share responsibilities for managing the Everglades and those who are affected by the restoration efforts.”	“The Dutch-funded pilot programme aimed at poverty reduction by empowering slum inhabitants and creating an enabling institutional framework to facilitate participation and co-operation between government agencies, NGOs and community organizations. [...] Objective: addressing the root causes of urban poverty, and empowering people to tackle these themselves.”	“The collective demand for the type and level of services is more likely to be clearly expressed when community members are accustomed to working together , where leaders are accountable, and where all stakeholders have a voice. Water-users groups are more likely to succeed in communities with cohesive community groups and regular civic activities.”
Focal activities: Centered on a regulative and/or capacity building intervention	“The primary goal of the collaborative program is to restore the ecological integrity of the Everglades—a unique and culturally significant ecosystem that has been impaired after decades of engineering for flood control, agricultural, and urban development [...]. This plan formalizes many of the shared goals of the collaborative program by identifying the operational projects that will re-engineer the existing flood control and water management infrastructure in the Everglades needed to restore, or at least improve, the health of the Everglades ecosystem.”	“Between 1993 and 1999 the Bangalore Urban Poverty Alleviation Programme (BUPP) was implemented in the south Indian metropolis of Bangalore.” Drafting “a Slum Development Plan (SDP) , reflecting the prioritized needs of the community. Guidance and support in drafting and implementing the plan was provided by an NGO working in the slum in question.	“In the early 1990s, three community-based rural water projects were prepared and implemented in Sri Lanka and in two states of India—Karnataka and Maharashtra. Their objective was to provide potable water to selected small rural communities that did not have reliable access to safe water within a kilometer or less.”

<p>Involvement: Involving SGC stakeholder groups/beneficiaries in its design and/or implementation</p>	<p>“Although most of these coordination and communication venues focus on the planning, technical, or implementation issues, there is also a state-sponsored venue, the Water Resources Advisory Commission (WRAC), designed to bring together citizen, business, tribal, and local agency input into the restoration process.”</p>	<p>“The vehicle for participation and empowerment at the local slum level was the ‘Slum Development Team’ (SDT), consisting of elected representatives (equal numbers of men and women) of each of the programme slums. Each SDT was expected to consult the slum community and subsequently draft a Slum Development Plan (SDP), reflecting the prioritized needs of the community.”</p>	<p>“These projects adopted different ‘community-based’ strategies. The Sri Lankan households were supposed to contribute 20% of construction costs, in either cash or labor. [...] In Sri Lanka and Karnataka, communities were supposed to take responsibility for operation and maintenance (O&M) (including the levying of household tariffs to cover O&M costs).”</p>
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Mitigative SGC Intervention

<p>Aim: Alleviating or helping cope with SGC implications (e.g., by satisfying basic yet critical needs)</p>	<p><i>Example: Pavlovich and Akoorie (2010, p. 378, p. 382); increasing the sustainability of the New Zealand fishery industry</i></p>	<p><i>Example: Brogaard (2017, p. 1184-1190); public services (e.g. eldercare, daycare, public schools, services for the disabled)</i></p>	<p><i>Example: Woodson (2016, p. 1414); drug development for disease of poverty (DoP)</i></p>
<p>Focal activities: Centered on a product/technology/service development and/or delivery intervention</p>	<p>“One example of the innovations that have been achieved is the extraction of collagen protein from the fish skin. This collagen is being used in the wine and beer industry to improve the clarity of the product with the protein removing unwanted particles from the liquid. This type of innovation is significant as not only does it increase the value of the fish waste but it also creates new opportunities in different industries.”</p>	<p>No details provided, but overall focus on eldercare, daycare, public schools, services for the disabled and other services</p>	<p>Providing patients with disease treatment: “PPPs can improve the DoP medicine market by connecting pharmaceutical suppliers with customers and lowering the barriers to entry so pharmaceutical companies can develop and sell medicines for DoP.”</p>
<p>Involvement: Designed/implemented mainly by core partners for beneficiaries</p>	<p>“Assisting this process of conservation are significant multi-sector research and development partnerships designed to offer effective sustainable management of both fishery and waste products.” P. 382: “Two forms of innovation emerged from the primary data regarding product innovation and process innovation.”</p>	<p>“260 PPP projects oriented towards innovating public services in healthcare and social services in Denmark.” “The most common types of public innovations and developed solutions in a PPP, which are examined in this article, are new products, processes, and services.”</p>	<p>“Health PPPs can be divided into two broad groups: R&D PPPs; and advocacy, education and medicine pricing PPPs. [...] The R&D PPPs are especially interesting for this study because they were the only PPPs that were developing DoP nanomedicines.”</p>
	<p>Products and processes innovation for individual and business customers allowing for: “the development of new industries around nutraceuticals which has the potential for developing products that add to health benefits for consumers.”</p>	<p>Focus on products and services for citizens: “By combining resources and competencies across sectors, public and private entities collaborate to develop new services or products for use in the public sector [...]”</p>	<p>Focus on public-private partnerships developing drugs for “disease of poverty,” for patients in low-income countries</p>

4.3 Examples of SGC-related Effect Reporting

	Example 1	Example 2	Example 3
Impact-focused SGC Effect Reporting			
	<i>Example: Scott (2015, p. 545-546); watershed groups to improve water chemistry and in-stream habitat conditions</i>	<i>Example: Thorpe (2018, p. 162, p. 166); making agricultural value chains work for smallholder farmer</i>	<i>Example: Wang (2012, p. 548); CSP to address HIV/AIDS in Yunnan, China</i>
Focus: Evidence of social or environmental change	“The WSA and NRSA assess the ecological condition of each site according to a series of measurements of chemical stressors, metrics of physical condition, and biological indicators.”	“It finds that public sector actors, through PPPs, are able to shape governance within value chains, influencing the relative skills, knowledge, and resources which different actors possess, the way that farmers are organized to engage in the value chain, and the attributes of procedural justice reflected in chain arrangements. ”	“[...] has generated positive effects in capacity building and stabilization of HIV transmission among intravenous drug users (IDUs), who form the majority of those with HIV in Yunnan. Data from the U.S. National Institute of Health (NIH) show that the rate of new HIV infection among IDUs in Yunnan has slowed. ”
Level: Capturing effects at the systems/target group/community level	Capturing effects at the ecosystem (i.e. watershed) level	Indicators used at country level (e.g. farmer satisfaction, crop yield, quality, crop income, and income stability)	“Thus these data show that Yunnan has effectively reached hidden intravenous drug users ; its integrated approach efficiently and simultaneously integrates multiple risks.”
Indicators: Assessing direct and indirect intervention effects	“ Six variables are selected to provide a holistic representation of stream condition and water quality: total phosphorus content and total nitrogen content (chemical stressors caused by human activities such as mining or agriculture), water turbidity and in-stream natural habitat (physical indicators reflect more proximate habitat destruction), and indices of riparian vegetation and benthic community abundance (biological indicators of condition).”	“During this analysis an unexpected observation came to light: that in the PPP which was showing the most promising results in terms of crop yield and income gains (Uganda), farmers expressed a surprisingly high degree of dissatisfaction. This observation led to a re-analysis of the case studies to consider [...]”	“[...] impact in reducing drug-related risky behaviours [...]: safer sex and better social behaviour along with less crime and drug use. A two-year follow-up showed that drug use decreased from 77.9 percent to 52.3 percent; safe sex increased from 31.4 percent to 47.1 percent; arrest rates dropped from 12.8 percent to 4.5 percent; social rehabilitation measured in terms of family relations and employment rates for drug users was also positive.”
Output-focused SGC Effect Reporting			
	<i>Example: Szulecki et al. (2011, pp. 716-717) CSPs for sustainable development in the energy sector</i>	<i>Example: Gazley (2010, p. 658) Social service provision in social, human, and health services</i>	<i>Example: Knai et al. (2015, pp. 1-2) Improving public health through the Public Health Responsibility Deal (RD)</i>
Focus: Evidence of SGC-related output (e.g., process/product/policy) change	“[...] our focus in assessing the effectiveness of transnational multi-stakeholder partnerships is on their output, that is, their actual activities such as issuing regulations, producing reports, conducting research, or organizing meetings.”	“measured (a) by the partnership managers’ perceived effectiveness and (b) survey on real performance improvements (cost-benefits, service enhancement, build relationships)”	“We focused on six [...] out of the eight RD food pledges [...]: out-of-home calorie labelling, salt reduction, calorie reduction, front-of-pack nutrition labelling, fruit and vegetable consumption, and saturated fats.”; “Based on seventeen evidence

Level: Capturing effects mainly at the output level	Focus on the outputs that are delivered to the specific target groups (e.g. individual and business customers)	“ Service enhancement = increased the level of [public] community services/programs and increased the quality of community services/programs.”	reviews, some of the RD food interventions could be effective, if fully implemented. ”
Indicators: Assessing the intervention’s direct effects	“Most of these functions have been operationalized and empirically assessed in the GSPD to measure effectiveness in terms of output. The amount of output is not only comparable among partnerships but can also be measured in terms of variables such as the amount of information published in a given period or dissemination in terms of how much information has been downloaded from the partnership Web site.”	“This analysis is based on two dependent variables : partnership accomplishments related to collaborative activity, and the perceived effectiveness of the partnership.”	Focus on individual consumers ; “However the most effective strategies to improve diet, such as food pricing strategies, restrictions on marketing, and reducing sugar intake, are not reflected in the RD food pledges.” “Finally, most interventions reported by organisations seemed either clearly (37%) or possibly (37%) already underway , regardless of the RD.”

Appendix 5. Coding Support

	“How do the authors frame the SGC-related problem?”	“How do the authors describe the SGC intervention?”	“How do the authors analyze and report the SGC-related effects?”
Guiding Questions	<p>SGC-related Problem Framing</p> <p>[Problematicizing] Do the authors discuss the SGC-related social /environmental problem features? <u>Or</u> do they rather elaborate the challenges related to a specific (extant or potential) solution?</p> <p>[SGC information] Do the authors provide an in-depth elaboration of the SGC? <u>Or</u> do they elaborate on the solution and mention the SGC only briefly or not at all?</p>	<p>SGC Intervention</p> <p>[Aim] Do the authors describe the intervention as targeting factors underlying the SGC (e.g., by enabling or empowering disadvantaged stakeholder groups)? <u>Or</u> do they describe it as aiming more at alleviating the SGC implications such as by satisfying basic needs?</p> <p>[Focal activities] Does the intervention focus on a regulative and/or capacity building theory of change? <u>Or</u> does it focus more on a product/service delivery/development intervention to address the SGC?</p> <p>[Involvement] Does the intervention largely involve SGC stake-holder groups/the target group in its design and/or implementation? <u>Or</u> is it designed and implemented mainly by core partners for beneficiaries/disadvantaged stakeholder groups?</p>	<p>SGC Effect Reporting</p> <p>[Focus] Does the evaluation provide evidence of social and/or environmental change? <u>Or</u> does it focus on the SGC-related output (e.g., process/product /service/policy) improvement?</p> <p>[Level] Does the evaluation capture effects at the systems/ community/target group level? <u>Or</u> does it capture effects at the process/ product/service level only?</p> <p>[Indicators] Does the evaluation include multiple indicators that also capture indirect intervention effects? <u>Or</u> does it focus on the direct effects only?</p>
Coding Observations	<ul style="list-style-type: none"> • Examples of “solutions”: food assistance, diets, forest management, recycling, energy efficiency, community development, economic development, facilitated market access, preventive awareness, and medication. • 31 studies did not mention the underlying social and/or environment problem or do so just briefly. 	<ul style="list-style-type: none"> • Capacity building includes infrastructure, networks, institutions, or other defined assets (i.e., not simply the provision of information). • Regulative interventions (e.g., agreements and shared governance systems) regulate behavior and define rights and responsibilities. • Interventions can have several sub-actions (Fraser et al., 2009). Regulative and/or capacity-building interventions may also include service/product dissemination in the process. Product and service dissemination can include awareness raising. • “Empowering” relates to giving target groups the right and means to address the SGC. • “Enabling” relates to creating an environment or infrastructure for targeted groups to help themselves. • “Involvement” can have different facets (O’Cathain et al., 2019), but should imply the opportunity to exert some influence. 	<ul style="list-style-type: none"> • SGC-related process/product/service improvement can be in quality and/or quantity. • Level: Question of data sources (e.g., who was interviewed) and level of aggregation. • Indirect effects may include opportunity costs as well as those produced by new initiatives and behavioral change outside the CSP boundaries (Stadler, 2016). For example, greater farmer revenues allowing to invest in health care and showing health improvement. • 10 evaluations did not build on clear indicators but provided evidence of indirect effects (thus, coded as impact-focused). • If scholars gathered data with “expert” interviews but reported multiple social/environmental effects or if they only measured direct effects but captured them at the SGC level, we coded the analysis as impact-focused. • If scholars used multiple indicators, incl. indirect effects but focused on process improvement at the organizational, technology, or product level, we coded the analysis as output-focused.