

Macdonald, Kate et al.

Working Paper

Jurisdictional approaches to sustainable commodity governance

Sustainable Global Supply Chains Discussion Papers, No. 4

Provided in Cooperation with:

Research Network Sustainable Global Supply Chains

Suggested Citation: Macdonald, Kate et al. (2023) : Jurisdictional approaches to sustainable commodity governance, Sustainable Global Supply Chains Discussion Papers, No. 4, Research Network Sustainable Global Supply Chains, Bonn, <https://doi.org/10.57671/sgscdp-2304>

This Version is available at:

<https://hdl.handle.net/10419/284370>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Research Network

Sustainable Global Supply Chains

Sustainable Global Supply Chains Discussion Papers Number 4

Jurisdictional Approaches to Sustainable Commodity Governance

Kate Macdonald, Rachel Diprose, Janina Grabs, Philip Schleifer, Justin Alger, Bahruddin, Ben Cashore, Paul Cisneros, Deborah Delgado, Rachael Garrett, William Hopkinson

Cite as: Macdonald K., Diprose, R., Grabs, J., Schleifer, P., Alger, J., Bahruddin, Cashore, B., Cisneros, P., Delgado, D., Garrett, R., Hopkinson and W. Hopkinson, 2023. Jurisdictional Approaches to Sustainable Commodity Governance. Sustainable Global Supply Chains Discussion Papers Number 4. Research Network Sustainable Global Supply Chains, www.sustainablesupplychains.org. doi: <https://doi.org/10.57671/sgscdp-2304>.

This Discussion Paper Series serves to disseminate the research results of work in progress prior to publication to encourage the exchange of ideas and academic debate. Inclusion of a paper in the Series does not constitute publication and should not limit publication in any other venue. Copyright remains with the authors. The views and opinions expressed are solely those of the author or authors.

Supported by the



Federal Ministry
for Economic Cooperation
and Development

The "Research Network Sustainable Global Supply Chains" is supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) and hosted by four organisations:

d.i.e

Deutsches Institut für
Entwicklungspolitik



German Development
Institute

G I G A

German Institute for Global and Area Studies
Leibniz-Institut für Globale und Regionale Studien



SWP

Stiftung Wissenschaft und Politik
German Institute for International
and Security Affairs

Jurisdictional Approaches to Sustainable Commodity Governance

September 2023

Authors:

Kate Macdonald¹

Rachael Diprose¹

Janina Grabs²

Philip Schleifer³

Justin Alger¹

Bahrudin⁴

Ben Cashore⁵

Paul Cisneros⁶

Deborah Delgado⁷

Rachael Garrett⁸

William Hopkinson^{1 9}

Abstract: Jurisdictional approaches (JAs) have emerged over the past decade as a significant mode of sustainable commodity governance, particularly in tropical forest countries. JAs are characterized by multi-stakeholder initiatives with substantial government involvement, aiming to integrate environmental, social, and economic objectives in land use management within territorial jurisdictions. Often framed as a progression beyond certification-based approaches, JAs offer a complementary strategy to supply chain-driven initiatives. Despite their novelty in the voluntary sustainability standards (VSS) context, JAs draw on longstanding policy agendas by governments and previous conservation efforts. Built upon initiatives like the United Nations' REDD+, contemporary JAs represent a convergence of different governance practices. This paper aims to provide conceptual clarity and a critical analysis of JAs, drawing on a global cross-commodity review of academic literature and policy publications. Five key themes are identified: conceptual analysis of JAs, inclusion and participation, the influence of social and political contexts, interactions with external governing institutions, and an assessment of impact and effectiveness. The synthesis highlights the flexibility of JAs and the diverse interpretations within the literature. The paper concludes with policy implications and avenues for future research, emphasizing the need for a nuanced understanding of JAs' potential contribution to sustainability governance.

¹ School of Social and Political Sciences, University of Melbourne.

² Department of Society, Politics and Sustainability, ESADE Business School, Barcelona.

³ Political Science Department, University of Amsterdam.

⁴ Department of Social Development and Welfare, Universitas Gadjah Mada.

⁵ Institute of Environment and Sustainability, Lee Kuan Yew School of Public Policy, National University of Singapore.

⁶ School of Government and Public Administration, National Institute for Advanced Studies, Ecuador.

⁷ Department of Social Sciences, Pontifical Catholic University of Peru.

⁸ Department of Geography and Conservation Research Institute, University of Cambridge.

⁹ The authors extend our acknowledgement and thanks to Juliette Meijer for excellent research assistance, to the Arts Faculty at the University of Melbourne for their financial support of this collaborative project, and to all participants of the incipient research network on jurisdictional approaches to sustainable commodity governance for the insightful discussions that informed the development of this discussion paper.

Contents

1.	Introduction	3
2.	Overview of Jurisdictional Approaches Literature	4
3.	Emerging Themes and Findings	7
3.1	Conceptualizing Jurisdictional Approaches	7
	Territorial Focus	8
	Government Involvement in Commodity-Producing Areas	8
	Distinct Holistic Design	9
3.2	Inclusion and Participation	10
	Forms of Multi-Stakeholder Participation	10
	Inclusion of Marginalized Groups	11
	Blind Spots	12
3.3	Socio-Economic and Political Factors in JAs	13
	Enabling or Constraining New Initiatives	14
	Interacting Socio-Economic and Political Conditions	15
	Blind Spots	15
3.4	External Governance Interactions	16
	International Governmental Programs and UN REDD+	17
	Private Supply Chain Initiatives and Public Regulation	18
	Linkages Through Domestic and Transnational Networks	19
	Blind Spots	20
3.5	Impact and Effectiveness	20
	Measurement Challenges	20
	Evaluations in Practice	22
	Blind Spots	23
4.	Discussion	24
4.1	Power Imbalances	24
4.2	Political Economy Dynamics	25
4.3	Unintended Outcomes	26
5.	Conclusion	27
	References	29

1. Introduction

Over the past decade, jurisdictional approaches (JAs) have developed as a “new” mode of sustainable commodity governance that is particularly prevalent in tropical forest countries. In broad terms, jurisdictional programs are defined as multi-stakeholder initiatives with significant government involvement that integrate environmental with social and economic policy objectives in land use management in policy-relevant (usually territorial) jurisdictions (Palmer and Paoli 2017; Boyd et al. 2020; Brandão et al. 2020). Most JAs, although not all, focus on subnational jurisdictions as a strategic level of governance in which policy interventions can be adjusted to local contexts, while still achieving significant scale (see Hovani et al. 2018a; Seymour et al. 2020; Von Essen and Lambin 2021).

The JA is often framed as a “beyond certification” approach by voluntary sustainability standards (VSS) practitioners (New Foresight 2018). Beginning in the 1990s, transnational NGOs and corporations partnered to advance VSS, often through the use of sustainability certifications throughout global commodity chains. However, after thirty years of practice, concerns over limited certification uptake and problems with on-the-ground implementation have led many organizations in the VSS community of practice to embrace JAs as a complementary approach to supply chain-driven initiatives (Van Houten and De Koning 2018).

Although considered novel in the VSS context, such territorial approaches to sustainable commodity governance are not new. There are long-standing policy agendas by national and subnational governments on these issues, which private sustainability standards have previously been criticized for “bypassing” (Bartley 2018). Integrated landscape approaches and community-based conservation programs in tropical forest countries date as far back as the 1980s (Reed et al. 2020). Many contemporary JAs have built on foundations laid by the United Nations’ Program on Reducing Emissions from Deforestation and Forest Degradation (UN’s REDD+) (Seymour et al. 2020, p. 4-5), and these approaches continue to co-exist and co-evolve. Against this background, instead of constituting an entirely novel approach, JAs are better understood as a convergence of different communities of practice to advance place-based, multi-stakeholder commodity governance.

The literature on JAs is increasingly robust, but scholarship differs on exactly what constitutes a JA, how they differ from existing practices, and their potential benefits to improving commodity governance. This lack of clarity is in part by design since JAs are intended to be flexible, allowing practitioners to take an à la carte approach to commodity governance depending on local needs and conditions. But there is also considerable confusion about exactly what makes a given initiative a JA, which has led to a proliferation of definitions that tend to highlight different features. Much of this literature is produced wholly or in part by practitioners themselves, who are at once actively promoting JAs while also shaping our understanding of them. The overarching goals of this working paper are to provide more conceptual clarity about JAs, and to apply a more critical scholarly lens to JAs to better understand their potential contribution to sustainability.

A decade into the making of this governance agenda, we conduct a global, cross-commodity review of the extant academic literature and select policy publications on these programs. Reflecting the multi-faceted nature of JAs, the review has been conducted by a group of scholars with diverse areas of regional expertise, and diverse research backgrounds in transnational private governance, comparative natural resource governance, sustainable development, and (inter)national forest policy.

The paper begins by outlining our methodology for this literature review, as well as providing a big picture overview of the literature. It will then provide a more detailed synthesis of the JA literature, with a focus on five emerging themes: namely, (1) an analysis of JAs as a concept; (2) inclusion and participation within JAs; (3) the role of both social and political context in shaping JAs; (4) interactions between JAs and external governing institutions; and finally, (5) an initial assessment of their impact and effectiveness in achieving sustainability objectives. A concluding section discusses policy implications and explores avenues for future research.

2. Overview of Jurisdictional Approaches Literature

Our methodological approach to the literature review involved mapping and synthesizing both the academic and grey literature on JAs. The mapping exercise organized the literature by category and sought to identify notable gaps (Grant and Booth 2009). We proceeded in four steps to generate a comprehensive list of articles. First, we conducted a broad keyword-based literature search on scaled-up, beyond certification approaches to sustainable commodity governance. All authors also added grey and academic literature already known to them. Second, we filtered this literature by only including articles explicitly invoking the jurisdictional approach concept, then mapped the articles by summarizing, inter alia, their type (academic or practitioner), key research questions, commodity type, region, year of publication, academic field, the main methodological and empirical approach used in each article, and data sources. Third, we used this literature map to identify emerging themes around which the rest of this paper is organized. We also prepared an annotated literature review that drew together insights from each piece on these themes. Finally, we summarized our findings in the narratives presented in the next section.

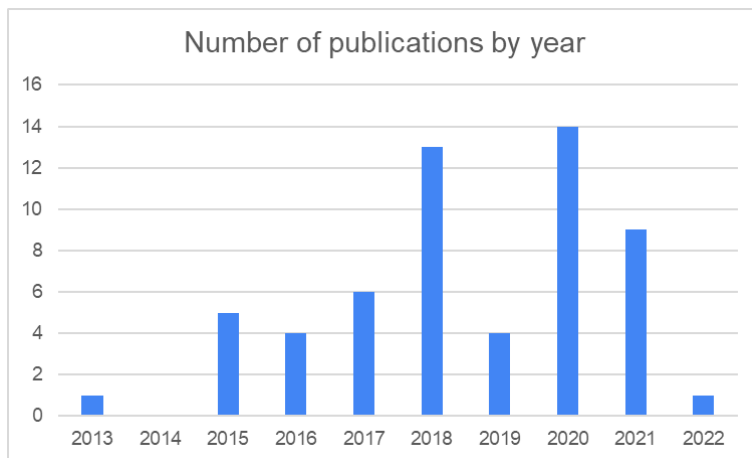
We evaluated 57 publications in total—key aspects of which are summarized in Figures 1-5 below—which were evenly split between academic and grey literature. This divide, however, was somewhat artificial. Much of the emergent academic work on JAs cited practice-oriented publications. Practitioners also appear frequently as co-authors on peer-reviewed academic papers. Further, as practitioners are participating in promoting JAs while also doing research on them, we note that this authorship structure influences the tone and focus of questions being asked in the current academic literature. This literature to date tends to explore more practice-oriented questions rather than broader critical questions about JAs, which at times provides a rather optimistic outlook on the potential of JAs. Such tendencies also highlight that the project of JAs itself is not value neutral.

Literature to date tends to comprise descriptive and analytical/conceptual work, including JAs' conceptualisation and functions, with less focus on evaluation. It also features many qualitative analyses of cases of JAs in practice, although such casework often lacks a detailed analysis of how JAs are working on the ground, and there is little comparative analysis of performance available. Less than half of the pieces in our assessment draw on concrete implementation cases as examples, and only slightly over half explicitly explore focal countries or jurisdictions. These descriptive overviews therefore only represent roughly half of the examined literature since the rest did not use specific cases.

As Figure 1 indicates, the JA literature is also relatively new, with most pieces explicitly mentioning JAs as a concept emerging after 2015. Older literature seems to be mainly concerned with jurisdictional REDD or other kinds of landscape-based agricultural approaches. This previous

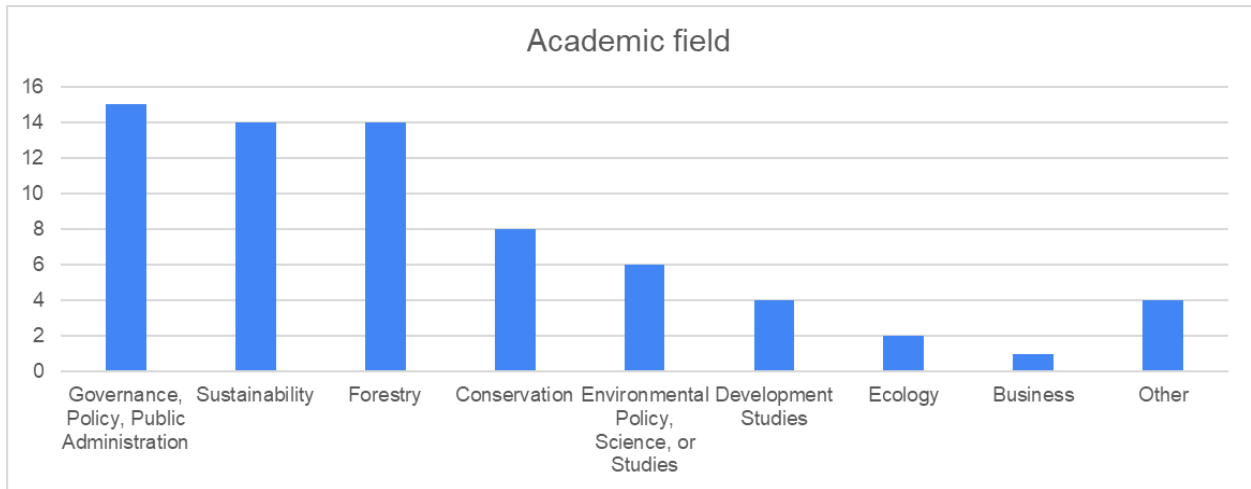
literature draws on other concepts (i.e., integrated landscape approaches, climate-smart/multifunctional landscapes, etc.) without placing private sector actors and supply chain initiatives at the centre. This is consistent with our claim above that JAs emerged out of the global commodity supply chain context, in the process drawing upon this longer history of territorial approaches.

Figure 1. Number of Assessed Publications on Commodity-Focused Jurisdictional Approaches by Year (n=57)



The disciplinary focus of existing work is unsurprisingly dominated by a focus on sustainability, forestry, and environmental fields, though JAs are also of growing interest in the fields of governance/policy studies and development studies (see Figure 2). The relative interdisciplinarity of the research reflects the multiple environmental and development goals (e.g. social inclusion) of JAs and their complex governance structures, which may bode well for assessing JAs from multiple perspectives. Notably, however, business and political economy research is almost absent, despite the strong emphasis within JAs on public collaboration with private entities and the importance of distributional questions arising from JAs.

Figure 2: Commodity-Focused Jurisdictional Approach Literature by Academic Field (n=26; fields can be double-counted)



The JA literature so far is also dominated by emphasis on specific countries and commodities (see Figures 3 and 4). The figures double-count articles if they are specific to more than one commodity and region. Brazil and Indonesia feature prominently in the literature because of their high forest cover, agro-commodity production in forest areas, and relative empowerment of subnational levels of government. However, we also see analyses focusing on Malaysia, other countries in Latin America (i.e., Colombia, Ecuador, and Peru), and Sub-Saharan Africa (i.e., Ghana, Liberia, and Mozambique). As the focus of early pioneering JA work, palm oil so far dominates sectoral case studies of JAs, but with cocoa, beef, soy, and coffee also seeing increasing scholarly attention. Given the relative breadth of countries and sectors in which JAs are being studied, it is surprising how little explicitly comparative work exists to date.

Figure 4: Commodity-Focused Jurisdictional Approach Literature by Type of Commodity, if specified (n=19; commodities can be double-counted)

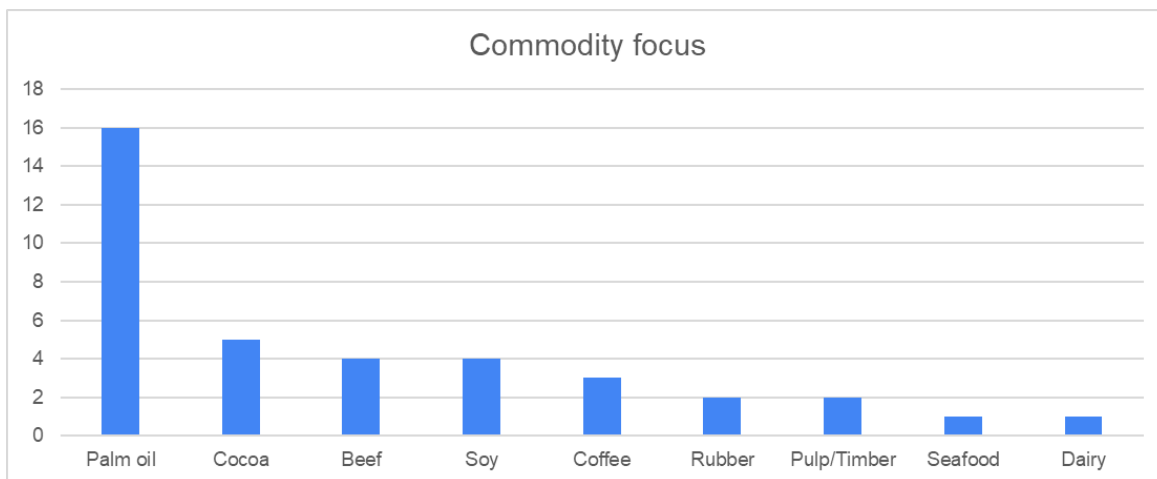
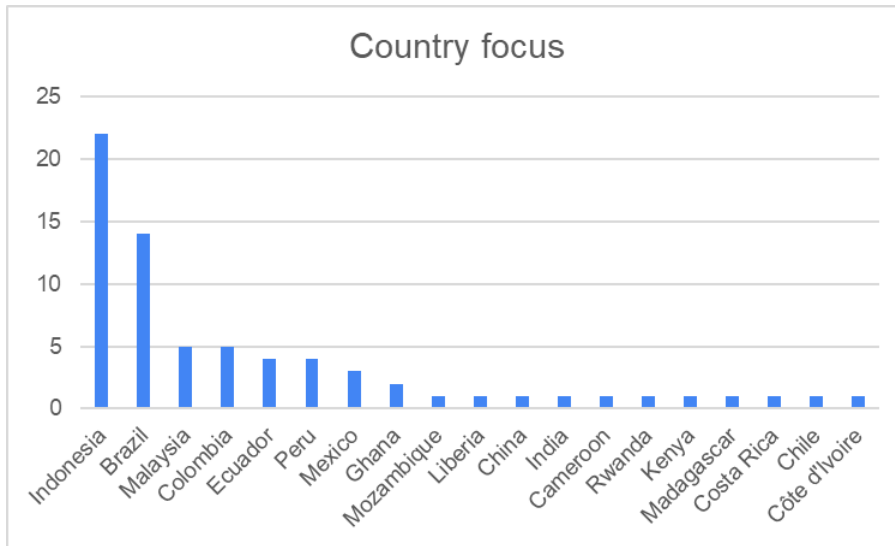


Figure 5: Commodity-Focused Jurisdictional Approach Literature by Country (n=33, countries can be double-counted)



3. Emerging Themes and Findings

3.1 Conceptualizing Jurisdictional Approaches

As noted above, one challenging aspect of analyzing JAs is the conceptual fuzziness that persists regarding what these approaches consist of and how they differ from other sustainability initiatives. Amidst widely varied and rapidly evolving practice and persistent ambiguity, the concept often serves as an umbrella term that references territorial approaches of different kinds. Such conceptual elasticity can be useful for opening dialogue around a broadly shared vocabulary. Yet some precision in shared conceptualization of the term is also important to support the evolution of collective communication and thinking (Palmer and Paoli 2017), as well to assess the broader impact of JAs. We thus first wrestle in greater depth with the core conceptual elements of JAs to sustainable commodity governance.

As Palmer and Paoli (2017, p. 3) observe, the term “is often used loosely to refer to any program oriented towards sustainable land use in a particular jurisdiction.” This indeed captures the fundamental starting point of many conceptualizations of JAs. It is inclusive of a broad range of programs aiming to advance goals of sustainable land and resource use at the territorial scale, which often build on long traditions of landscape approaches to sustainability (Hovani et al. 2018b; Reed et al. 2020; Schleifer 2023, p.137-165). At the same time, JAs are usually differentiated from other overlapping approaches based on a range of additional characteristics, including territorial boundaries, strong government involvement, holistic aims, and institutional designs, each of which is discussed further below. While most authors have a shared foundational understanding of JAs, they vary significantly in whether they include all additional characteristics in their conceptualization of JAs, the emphasis they place on each additional characteristic, and the extent to which they include these characteristics in their explanations of the origins, aims, and rationale for JAs.

Territorial Focus

JAs differ from broader landscape approaches primarily based on their spatial boundaries. These areas map onto the policy-relevant boundaries of a particular administrative, political, or legal jurisdiction (Stickler et al. 2018; Brandão et al. 2020; Schleifer 2023, p. 137-165), as opposed to the boundaries of either ecologically defined landscapes or specific production locations or land concessions (Van Houten and De Koning 2018; Von Essen and Lambin 2021).

This shift in scale to jurisdictionally-defined territories is the heart of the jurisdictional concept. Advocates of JAs have argued that emphasizing policy-making jurisdictions offers several potential benefits for the effectiveness of sustainability interventions. By promoting sustainable land use and deforestation aims at this scale, it has been variously argued that this can lift some burden from companies or private land concession holders, increase the credibility of commitments by involving local governments, and improve effectiveness by going beyond limited and somewhat arbitrary boundaries of company concessions (Pirard et al. 2015, p. 13). The case for such territorial approaches has also frequently been linked to a broader desire to improve the effectiveness of a range of sustainable development interventions by localizing sustainable development, empowering local governments and communities, and thus recognizing and responding to the complexities of local economic, ecological, and social transformation processes to promote more sustainable and equitable development (Forster et al. 2021).

Government Involvement in Commodity-Producing Areas

Closely linked to the territorial focus is that JAs centre on harnessing the involvement and often leadership of governments to hold both other levels of government and the private sector accountable for sustainability outcomes (Stickler et al. 2018). Some organisations and scholars explicitly emphasize subnational governments in their definitions of JAs (e.g. GIZ 2018). Bishai et al. (2022, p. 9, emphasis added), for example, define JAs as “A type of landscape approach that advances shared sustainability goals *where the landscape is defined by administrative boundaries of subnational governments* and the approach is implemented with a high level of government involvement.” Yet others acknowledge that jurisdictional scales can vary according to the political and administrative contexts of particular jurisdictions, with JAs operating at the scales of “nation-states, states, provinces, districts, counties, and other political administrative units” (Stickler et al. 2018, p. 147; LTKL 2019; Ingram et al. 2020). They also operate across governmental scales, being initiated at varied territorial levels and then reaching up or down (i.e., via supply chains) to facilitate important processes of policy influence or participatory planning (Forster et al. 2021).

For many, linking external sustainability interventions to policy commitments from local governments lies at the heart of the rationale for pursuing JAs. Stickler et al. (2018, p. 148), for example, highlight the value of a territorial focus in facilitating “strategic alignment with public policies and programmes” and enabling governments to be “leaders or active participants in strategy development and implementation.” Such connections can enable active government engagement through a range of measures including “policies, regulations, fiscal incentives, land use and action planning, enforcement and/or monitoring” (GIZ 2018, p. 2). Strong government involvement can also enable efforts to develop rigorous performance monitoring and reporting frameworks that blend international sustainability standards with local performance evaluation frameworks. In this

way, local actors can more readily take responsibility for tracking and reporting progress, while also ensuring that monitoring and reporting frameworks are sufficiently aligned with international standards to help attract ongoing support and resourcing (Nepstad et al. 2013; Palmer and Paoli 2017; Milhorange and Bursztyn 2018). As Larsen et al. (2018, p. 552) elaborate, this rationale for prioritizing local government engagement and leadership in promoting large-scale sustainability initiatives can be compelling in highly decentralized contexts, where “little may be accomplished unless the individual provinces and regencies, who hold authorities in land use planning and permitting, are involved.” The extent to which various levels of government must be involved for an initiative to be considered a JA is one key area of conceptual fuzziness in the literature for which greater clarity is needed.

Distinct Holistic Design

Also widely viewed as essential to JAs is embracing an approach to sustainability interventions that is variously described as holistic (Bastos Lima and Persson 2020, p. 2), comprehensive (Umunay et al. 2018, p. 5), aligned, integrated, hybrid, or collaborative. Broadly, the intent is that JAs connect otherwise fragmented and piecemeal interventions in a geographical space. A holistic approach recognizes the complexity of trying to bring about large-scale sustainability transitions by taking seriously the need for long-term, systemic changes to many aspects of natural resource governance and management, while ensuring that interventions are adapted to local realities and complementary to other approaches (Hovani et al. 2018b). This holistic design allows JAs to build on established landscape approaches to sustainability that operate across a range of conservation and natural resource governance fields. Doing so brings together different governance sectors, stakeholders, and scales in land and natural resource management (Ingram et al. 2020; Peteru et al. 2021). Despite agreement that JAs are holistic, there is variation in which elements of integration are emphasized and prioritized in both the conceptualization and design of JAs.

The literature diverges on which dimensions of JAs to emphasize when discussing holistic design. The key element, as Hovani et al. (2018b, p. 5) conceptualize, is that JA programs are “a network of inter-related initiatives working together to achieve wall-to-wall sustainability goals” (see also Garrett et al. 2021; Von Essen and Lambin 2021). Those initiatives can involve integration across sectors, sustainability aims, governance actors, scale, and types of policy interventions. Holistic design can also involve integration between government agencies (horizontal integration) or between levels of government (vertical integration) (Hovani et al. 2018b). The advantage of holistic design is that it distributes power, thereby not concentrating authority nor relying on a single (potentially uncommitted) actor. The overarching goal is to “*reconcile competing social, economic and environmental objectives*” (Buchanan et al. 2019, p. 7, emphasis added), while at the same time coordinating interventions in a specified territory. The intersectoral nature of JAs is also thought to increase the equity of initiatives by enabling a better distribution of opportunities, costs, and benefits (Garrett et al. 2022).

Holistic design is also frequently understood as “alignment” – creating coordination and mutually reinforcing interactions. This alignment can occur between interventions targeting different commodity sectors (Nepstad et al. 2013), range of stakeholders (Paoli et al. 2016, p. 6; Buchanan et al. 2019), or territorial and supply chain initiatives (Pacheco et al. 2018; Seymour et al. 2020; Boshoven et al. 2021). The promise of the latter is to link domestic, government-led sustainability

governance with external financial and market incentives (see section 3.4). Similarly, holistic design within JAs often refers to coordinating a broad range of different market and policy instruments. This coordination includes collecting and sharing sustainability data, developing collaborative policy and road maps for sustainable commodity production, and coordinating resourcing and incentives to support governments and other stakeholders committed to sustainable production (LTKL 2019, p. 2). There is, quite clearly, considerable ambiguity in the literature about what exactly JAs are aligning (Chervier et al. 2020).

3.2 Inclusion and Participation

A commitment to inclusion and participation lies at the heart of many arguments for embracing JAs to sustainable commodity governance. Yet, in practice, translating such aspirations into practice continues to face significant obstacles. For many JA advocates, a commitment to inclusive and participatory approaches is expressed primarily via multi-stakeholder governance designs that support the participation and engagement of a range of government, business, and civil society stakeholders, particularly in decision-making forums; although other work extends inclusion to different aspects of implementation and beneficiaries. These designs can promote co-ownership of JAs and enable more robust, legitimate, and durable institutionalization of sustainability programs at the local level. Local leadership and ownership is particularly important given longstanding criticisms of externally imposed initiatives in these places, in which producers have been perceived to be “at the receiving end of mandates” dictated by “demand-side consumer companies and traders,” which is widely viewed as undermining “the willingness of both producers and their local governments to engage” (Wolosin 2016, p. 4).¹⁰

Including local government actors in JAs is particularly important in their initial establishment and promotion. A multi-stakeholder approach at this early stage helps to build trust, gain goodwill, manage conflict, foster wider coalitions of supporters amongst influential local actors, and pool the diverse sources of knowledge, resources, and legitimacy possessed by actors of different kinds (Chervier et al. 2020; Forster et al. 2021; Von Essen and Lambin 2021). Inclusiveness and participation are embraced as core means of building local legitimacy for JAs and laying the foundations for their ongoing political and institutional sustainability (Buchanan et al. 2019). However, as is discussed below, other literature on antecedent REDD+ and landscape initiatives have highlighted the risks of elite capture, including state actors watering down or stalling initiatives that undermine extractive interests from which they receive political or personal benefits (e.g., Seymour et al. 2020).

Forms of Multi-Stakeholder Participation

Multi-stakeholder participation in JA governance arrangements can take various concrete forms. These encompass: (1) the establishment of formalized institutional structures or processes to facilitate regular multi-stakeholder consultation and dialogue; (2) co-development of ‘roadmaps’ to coordinate interventions in support of sustainable production and incorporating sustainability principles into local development plans; (3) development of collaborative approaches to collecting and reporting data on sustainability performance (Peteru et al. 2021); and (4) facilitating resourcing,

¹⁰ In some cases, local governments have viewed such externally imposed commitments “as a form of neo-colonialism” (Wolosin 2016, p.4).

network building, capacity building, and incentives for regions committed to promoting sustainable production (LTKL 2019). These approaches often build on pre-existing multi-stakeholder processes used in participatory natural resource governance arrangements such as jurisdictional REDD+ projects (Hovani et al. 2018b).

Those empirical case studies of JAs that have so far been developed in the literature demonstrate a variety of distinct multi-stakeholder processes. In Sabah (Malaysia) and Seruyan (Indonesia), multi-stakeholder steering committees were established by sub-national governments to manage the implementation of the Roundtable on Sustainable Palms Oil's (RSPO) jurisdictional certification pilot. The pilot included equal representation of government agencies, companies, and NGOs (Colchester et al. 2020a; 2020b; 2020c). In Mato Grosso, Brazil, the local government established a Produce, Conserve, Include (PCI) strategy that serves as a broad public planning instrument, incorporating the participation of government, private sector, and civil society organizations (CSOs) alongside farmer associations (Boyd et al. 2018; Milhorange and Bursztyn 2018). Local stakeholders dominate the PCI structure, but international NGOs and companies also participate (Schleifer 2023, p. 137-165). In Merangin District in Jambi Province, Indonesia, multi-stakeholder negotiations have been used to raise awareness and build knowledge, foster stronger relationships among local participants and external actors, and facilitate dialogue in policy planning processes (Minang et al. 2015). In Ecuador, somewhat unusually, a pilot of RSPO's jurisdictional certification program is being established at the national (rather than subnational) level, led by the national government and organized through an Inter-Institutional Steering Committee for Sustainable Palm Oil (CISPS), which encompasses equal formal representation from the broad categories of government, palm oil supply chain actors and CSOs (Alvarado 2021).¹¹

While efforts to facilitate participation through such formal mechanisms of multi-stakeholder governance lie at the heart of JAs, aspirational principles of wider grassroots and other stakeholder inclusion have proven more challenging to implement. This is especially true of marginalized groups such as Indigenous communities and smallholder farmers. The stated aims of JAs are often explicit in their ambition to include marginalized groups in governance processes. Indeed, in response to prior criticisms of severe barriers to including smallholder farmers in sourcing networks of many supply chain sustainability programs, providing such an enabling framework is a core rationale for shifting towards jurisdictional sourcing of sustainable commodities (Boyd et al. 2018; Hovani et al. 2018b; Brandão et al. 2020; Schleifer 2023, p. 137-165).

Inclusion of Marginalized Groups

Despite the stated aims of JAs, there has been little documentation of significant shifts in practice toward strengthened inclusion of marginalized groups. Research findings of JAs to date tend to show persistent gaps in the development of participatory mechanisms for decision making and implementation (Nepstad 2017; Pacheco et al. 2017; Stickler et al. 2018; Bastos Lima and Persson 2020; Seymour et al. 2020; Von Essen and Lambin 2021). In many JAs, the independent smallholder sector is cited as a priority for interventions in the form of a variety of training, capacity building, or

¹¹ Participation and inclusion is also promoted through application of a National Consultation Guide for the Implementation of REDD+ Actions on Collective Lands or Territories, with regard to obtaining consent of traditional landowners based on rights established under the national constitution (Alvarado 2021, p. e21).

preferential sourcing programs (Schleifer 2023, p. 137-165), but this focus on smallholders as beneficiaries has often not translated into smallholder representation in decision making forums.

Alvarado (2021), for example, observes that the RSPO's jurisdictional pilot in Ecuador has so far lacked systematic inclusion of several key stakeholder groups, including small-scale producers, social NGOs, Indigenous and Afro-Ecuadorian peoples' organizations, and government representatives focused on social issues. In other cases, while efforts have been made to include marginalized groups in multi-stakeholder governance arrangements, inclusiveness has remained constrained in significant ways, such as in planning processes. In Mato Grosso, the government established a formal dialogue with Indigenous communities (Boyd et al. 2018), but current studies suggest Indigenous groups have had little direct participation in the elaboration of PCI or associated planning process (Milhorance and Bursztyn 2018). This is despite some international PCI participants promoting an agenda of rights and livelihoods protection for traditional communities. In Central Kalimantan, Indonesia, the multi-stakeholder working group established to support an RSPO jurisdictional certification pilot included Indigenous peoples' organizations alongside a broad range of other stakeholders, though observers argued the forum remained dominated by government officials (Van Houten and De Koning 2018; Schleifer 2023, p. 137-165). Similarly, analysts of a jurisdictional initiative in Kapuas Hulu, Indonesia have reported a lack of free, prior, and informed consent (FPIC) procedures for Indigenous peoples, their inclusion in decision-making, or adequate mechanisms of information-sharing with affected communities (Colchester et al. 2020a). There is also little discussion in the current studies on the extent to which Indigenous peoples are recognised as knowledge holders.

Significant contestation continues to surround decisions about when, how, and in what forms to include smallholder farmers or other marginalized groups in decision-making processes, which is especially problematic given the different capacities and forms of expertise possessed by these groups (Colchester et al. 2020a). There are ongoing questions about the role of NGOs in JA processes, especially the forms and sources of their legitimacy relative to private sector actors and governments (Paoli et al. 2016). This is perhaps a natural reflection of the deeply contested aims of JAs, with some viewing them primarily as means of building powerful coalitions in support of preventing deforestation and safeguarding forest areas, while others stress the need to prioritize inclusion, indigenous rights recognition, and related process for managing contested resource access and land use (Colchester et al. 2020a; Seymour et al. 2020). Indeed, there is limited work exploring how groups beyond small-holder farmers, such as Indigenous communities, agricultural labourers, or other rights holders, are included in consultation, planning, and decision-making processes.

Blind Spots

Despite the emergence of important bodies of work on themes of inclusion and participation, it is thus noteworthy—particularly considering the discursive emphasis that is often placed on these themes—to observe a lack of detailed empirical research focusing on an in-depth evaluation of the scope and quality of participation of marginalized groups in JAs (but c.f. DiGiano et al. 2020).

This analysis suggests the need for more research on how JAs engage with socially, economically, and politically marginalized groups in focal jurisdictions, how JAs intersect with broader patterns of socioeconomic inequalities in these jurisdictions, what participation means, and how it is best

effected for different contextually-specific social groups. Such research could also fruitfully map how benefits are distributed between different social groups, and examine the degree to which inclusion or exclusion shapes different kinds of outcomes for each. More systematic analysis of inclusion and participation of marginalized stakeholders could help to understand and to inform ongoing contestation regarding how best to distribute voice and influence between different kinds of government, business, and NGO interests, between local and international actors, and between goals of empowering marginalized actors versus recruiting support from established powerful actors who are recognized to act as veto players.

The lack of existing research on these kinds of social dynamics in the JA literature is a particularly noteworthy and surprising gap in view of the extensive focus on social as well as environmental issues in broader scholarship on sustainability governance. Such broader scholarship has highlighted the importance of protecting land rights, use, and equity for land- and forest-dependent communities in implementation sites (e.g., Blomquist 2009; Brockhaus et al. 2011; Mwangi and Wardell 2012; Tseng et al. 2021), reflected critically on the role of global FPIC or Consultation standards as means of facilitating customary, indigenous, and community involvement (e.g. Angelsen 2009; Wunder 2009; Tacconi et al. 2010; Anglesen et al. 2012; Tacconi 2012), and explored the potential to move beyond simple concern for ‘representation’ of social interests to broader goals of empowering marginalized actors and communities in the design and implementation of sustainability initiatives. Yet despite the potential for the more systematic application of such approaches to the context of JAs, the framing of JAs as primarily means of tackling deforestation and land management has seemingly crowded out attention to these critical questions about social inclusion (Newton and Benzeev 2018).

3.3 Socio-Economic and Political Factors in JAs

An expansive literature on environmental sustainability initiatives emphasises how features of social, environmental, economic, and multi-level political contexts enable or constrain intervention pathways and outcomes under different conditions, especially at subnational levels in sites of conservation or production. This includes scholarship examining how global governance interventions and transnational initiatives targeting sustainable commodities extraction, land use, and environmental management influence—and in turn are shaped and constrained by—domestic arenas (e.g. McCarthy 2004; Bebbington 2012, 2017; Bernstein and Cashore 2012; Molenaar et al. 2015; Arts et al. 2017; Nolte et. al 2017; Diprose et al. 2019, 2022; Barletti et al. 2020; Brandão et al. 2020). It also includes scholarship on antecedent or related initiatives such as landscape approaches to ecosystem management and REDD+, which has often examined how these interact with and are operationalised within multi-level social and political contexts (e.g., Duffy 2006; Angelsen 2009; Anglesen et al. 2012; Redosudarmo et al. 2013; Sills et al. 2014; Affif 2016). This section explores the literature in relation to similar themes for JAs, identifying the extent to which socio-political context, political economy, and power relations are considered in emergent literature and analysis. In a later discussion, we identify how these broader literatures can provide important insights for future work on JAs.

Despite the lessons in the other literatures, the existing scholarship on JAs does not emphasize or sufficiently explore how socio-economic and political context interact with emergent initiatives and constrain or enable JAs. There is a particularly noticeable absence of distinctively political questions:

including, (1) how different interest groups contest or capture design and implementation, (2) how elites might resist, enable, or limit JAs, and (3) the potential risks of ‘bringing the state back in’ to guide the sustainability agenda (e.g., Seymour et al. 2020). There are some exceptions in which research includes some implicit contextual socio-economic or political analysis, but it rarely includes systematic analysis. While this may be understandable given the early stage of development of most JAs, understanding power dynamics is nonetheless essential even (perhaps especially) at the stage of policy and program design for shaping outcomes. Bahruddin et al. (2023) and Hovani et al. (2018b) emphasize that it is essential that JAs demonstrate an understanding of local socio-economic and political contexts to be viable.

Most of the relatively few studies that address socio-economic and political context focus on JAs linked to prior REDD+ pilots. These studies often critically evaluate these initiatives, examining how communities have fared in relation to land and resource rights, tenure security, opportunities for participation, FPIC and consultation, and access to compliance, governance, and grievance systems (e.g., Hovani et al. 2018b; Colchester 2020; Colchester et al. 2020a, b; Alvarado 2021). Other studies have been more forward-looking, seeking to conceptualize how design elements incorporated into REDD+, such as FPIC, the rights of Indigenous Peoples and communities, and benefits sharing and participation have been incorporated into prospective JA projects (e.g., DiGiano et al. 2020).

Enabling or Constraining New Initiatives

The studies that do consider socio-economic and political contexts often focus on conditions for getting new initiatives off the ground. For example, one study of REDD+ in Kalimantan discussed the importance of aligning the initiative to community needs to build political will and encourage advocates among local stakeholders (Hovani et al. 2018b). The study emphasized how governance arrangements could enable or constrain the initiative, including the regulatory environment, spatial planning and tenure security, and institutional capacity. Another study—based on a comparative analysis of cases in Indonesia, Bahruddin et al. (2023)—demonstrates that the pathways through which JAs exercise the most influence are sensitive to the features of subnational contexts.

Most of the literature focused on socio-economic and political context relies on making forward-looking, propositional arguments about what aspects might matter in JA design, occasionally testing these arguments against early stages of existing programs. This work draws on studies of antecedent sustainability initiatives, such as REDD+ or other landscape approaches. Alternatively, these forward-looking propositions are established inductively by groups of practitioners working on existing JA pilots, most notably in Indonesia and Latin America. Political will and political turnover feature prominently as essential for enabling or constraining JAs (Meyer and Miller 2015; Fishman et al. 2017; Nepstad 2017; Boyd et al. 2018; Brandão et al. 2020; Chervier et al. 2020; Proforest 2020; Boshoven et al. 2021; Garcia et al. 2021; Von Essen and Lambin 2021; Schleifer 2023, p. 137-165).

The regulatory environment and institutional arrangements can also impact JA operationalization (see Bahruddin et al. 2023), including: (1) the nature of the political system (i.e., federal versus non-federal, decentralized, etc.) or devolved power (Boyd et al. 2018; Seymour et al. 2020); (2) the potential for corruption (LTKL 2019; Boshoven et al. 2021); (3) policy alignment and leadership support across levels of government (Nepstad 2017; Brandão et al. 2020; Boshoven et al. 2021); (4)

an appropriate regulatory regime and the ability to enforce laws and regulations (Pirard et al. 2015; Paoli et al. 2016; Hovani et al. 2018b; LTKL 2019, 2020; Colchester et al. 2020a; Boshoven et al. 2021; Garcia et al. 2021); (5) enabling policies and political stability (Boshoven et al. 2021); and (6), public sector and institutional capacity to support the initiative (Nepstad 2017; Boyd et al. 2018; Hovani et al. 2018b). Jurisdiction size has also been identified as a potentially relevant factor, with JAs being more likely to succeed where the targeted jurisdictions are “small enough to enable stakeholders to come together, but large enough to provide a meaningful commodity supply and reduce ‘leakage’ across jurisdictional boundaries” (Boshoven et al. 2021, p. 2).

Finally, Boshoven et al. (2021) highlight economic and production features that seem to be conducive to new JAs. These include land use dynamics in which: (1) “the primary threat to ecosystem conversion comes from the production of a few internationally traded agricultural commodities” (Boshoven et al. 2021, p. 8); (2) there is an “opportunity to intensify crop production on existing and/or degraded lands so as to allow for economic growth without bringing new lands into production”; and finally (3), the availability of “economic and other incentives to [key local and global] stakeholders that are material in terms of scope and size to warrant the needed investment in capacity, trust-building, and expenditure of political will” (p. 11).

Interacting Socio-Economic and Political Conditions

Interacting socio-economic and political conditions also play an important role in enabling or constraining JAs. These interactions include: (1) land tenure security, land use planning, and the degree of disputes or registration backlogs (Van Houten and De Koning 2018; LTKL 2019; Colchester 2020; Colchester et al. 2020b; Seymour et al. 2020; Boshoven et al. 2021; Peteru et al. 2021); (2) management of existing power relations, social capital, and trust (Chervier et al. 2020); (3) inward migration and other population pressures (Boshoven et al. 2021); and (4), the possibility for production intensification in already degraded lands (Boshoven et al. 2021). Social learning for stakeholders within a JA is also an important element of these interactions, including stakeholders having access to multiple sources of learning, access to adequate resources, and the involvement of external regimes, notably higher government levels (Chervier et al. 2020). Bahrudin et al. (2023) similarly emphasize the importance of socio-economic, political and environmental governance interactions with implementation pathways, including: (1) aspects of the political context, such as political will to support JAs and related social and inter-group relations and continuity and alignment of state support; (2) the local structure of production and resource endowments that shape the economic context; and (3) the environmental governance context, including the existence of prior sustainable commodities initiatives that have shaped the policy environment and the capabilities and influence of civil society, international organizations, and private sector actors alongside the state. Much of the process of change, they find, is contingent on actor interests, elite coalitions, and power relations within contested multi-scalar processes of sustainable commodity governance.

Blind Spots

As is clear from the above, there is a wide range of different socio-economic and political features that can enable or constrain JAs. Few studies, however, place power dynamics, elite coalitions, or social relations and inequalities at the centre of analysis, though there are some exceptions (see Hovani et al. 2018a; Seymour et al. 2020; Bahrudin et al. 2023). More of these studies are needed

since sustainability interventions are sensitive to complex and varied subnational socio-economic and political contexts, including multi-level power dynamics, stakeholder coalitions, and the influence of the state. Ensuring strong state support for JAs requires a nuanced understanding of socio-economic and political context, especially to ensure that incentives align with state priorities, reducing the likelihood that the state will attempt to circumvent an initiative.

3.4 External Governance Interactions

As the previous section has shown, jurisdictional programs do not exist in an institutional vacuum but are embedded in complex social and political contexts that can enable and constrain their development. As a “new” mode of sustainable commodity governance, they are also part and parcel of an increasingly crowded governance sphere (Cashore et al. 2021), spanning sectors (public, private), policy domains (i.e., forest governance, rural development, and social inclusion), and levels of governance (local, national, and transnational). As described in section 3.1, a key feature of jurisdictional programs is their distinctively holistic approach—what Furumo and Lambin (2021, p. 3) call “coordinated polycentrism”—that seeks to integrate multiple types of actors and interventions in a purposeful way.

This coordinated polycentrism includes interactions between public, private, local, and transnational actors that directly participate in jurisdictional programs, the broader JA community of practice, and its environmental and social change agenda. These interactions often take place in the context of local multi-stakeholder processes, whose level of institutionalization can vary from loose, informal networks in the early stages of program development to more formalized organizational structures in jurisdictional programs that are more advanced (Paoli et al. 2016; Hovani et al. 2018a). Conceptually speaking, these interactions can be said to be “internal” to a jurisdictional program. In addition, jurisdictional programs, as governance entities, also are engaged in a myriad of what could be labeled “external” interactions with governance actors and instruments that are not directly involved in these programs. These external interactions or linkages can also be of a more formal or informal nature, and they can evolve organically or can be the product of purposeful design. For illustrative purposes, it is helpful to make the complexity of interactions involving jurisdictional programs analytically tangible in this way. However, it is important to note that the distinction between internal and external interactions can be difficult to establish in practice. As discussed in Section 3.1, one reason for this is the fuzziness of the JA concept. Another reason is that many jurisdictional programs are still in an early phase of institutional development (Von Essen and Lambin 2021), which means that the boundaries of these programs are still malleable and, therefore, often difficult to establish.

With this caveat in mind, this section focuses on the external interactions or linkages of (sub)national jurisdictional programs. The idea of interlinking intergovernmental, transnational, and (sub)national governance instruments to advance environmental, economic, and social developmental objectives in tropical forest countries has been central to the JA concept from the very beginning (Nepstad et al. 2013). As the approach evolves, the JA literature continues to emphasize the need to integrate these programs with other governance actors and instruments. The need to generate “external incentives” for local stakeholders through linking jurisdictional programs to international climate finance mechanisms and private market-based instruments is a particular recurring theme in academic and practitioner-oriented publications (e.g., Irawan et al. 2019; Seymour

et al. 2020, p. 7-12; Boshoven et al. 2021). Moreover, this literature stresses the need to interlink jurisdictional programs horizontally to facilitate learning and collective action between jurisdictional programs nationally and internationally (e.g., Seymour et al. 2020, p. 15).

Taking a closer look at the external dimension of jurisdictional program interactions, the remainder of this section reviews three emerging institutional linkages, namely: linkages with the United Nations Program on REDD+, linkages with private supply chain initiatives and emerging public supply chain regulations in Northern consumer countries, and the linkages between jurisdictional programs in the context of national and transnational jurisdictional networks.

International Governmental Programs and UN REDD+

Many (sub)national jurisdictional programs have linkages with intergovernmental organizations and their programs, which in turn have begun to support jurisdictional programs for sustainable commodity governance through a variety of “orchestration measures” (see Abbott et al. 2015), such as convening, agenda-setting, assistance, and endorsement. The UN REDD+ program has played an especially important role in this regard, as the JA concept has partially originated in and organically co-evolved with jurisdictional REDD+ initiatives. This origin has generated a degree of path dependence. Moreover, even though REDD+ finance has turned out to be less transformative for tropical forests than some had initially hoped (Seymour and Busch 2016, p. 359), it continues to be an important international finance mechanism to create external incentives for local stakeholders to support jurisdictional programs.

Created under the umbrella of the United Nations Framework Convention on Climate Change (UNFCCC), REDD+ provides results-based payments to tropical forest countries for reductions in deforestation. Initially focused on individual conservation projects, the scope of REDD+ increased over time to cover entire jurisdictions, including subnational jurisdictions. The jurisdictional REDD+ agenda has been described as an “institutional antecedent” of JAs (Seymour et al. 2020, p. 4-5). Many advanced subnational jurisdictional programs, for example, in Acre (Brazil), Mato Grosso (Brazil), Central Kalimantan (Indonesia), and San Martin (Peru), have received technical and financial support through REDD+ and/or REDD+ provisions have been included in subnational policies and legislation (Boyd et al. 2018; Milhorange and Bursztyn 2018). However, existing studies on the subnational jurisdictional REDD+ suggest that these programs have been slow to develop due to a multitude of political and technical challenges (see Duchelle et al. 2018; Irawan et al. 2019), as well as waning political enthusiasm for the approach (Seymour et al. 2020, p. 4-5). Even though progress with the subnational jurisdictional REDD+ agenda has been modest so far, it has created important foundations in knowledge infrastructure, stakeholder networks, and institutional capacities. In many of these locations, the expanding JA community of practice has built on these foundations to develop these programs further (Seymour et al. 2020, p. 5).

Recent developments, which saw major funds for jurisdictional REDD+ mobilized at the international level, could also make REDD+ once again central to the development of the JA and attempts to generate external support and incentives for local stakeholders to participate in these programs. Launched in 2021, the Lowering Emissions by Accelerating Forest Finance (LEAF) Coalition, a UN-endorsed public-private partnership, has raised USD 1.5 billion to provide results-based payments to tropical forest jurisdictions. In a promising move, several Brazilian states,

including Amapá, Amazonas, Mato Grosso, and Pará, signed a memorandum of understanding with the LEAF Coalition at the COP 27 Climate Summit in Sharm el-Sheikh (Leaf Coalition n.d.).

Private Supply Chain Initiatives and Public Regulation

In addition to the co-evolutionary nature of interactions between the jurisdictional approach community of practice and REDD+, efforts are underway to purposefully link (sub)national jurisdictional programs with existing supply chain initiatives to reduce tropical deforestation (see Lambin et al. 2018). This includes private supply chain initiatives, such as company pledges and sectoral certification programs, as well as emerging public supply chain regulations in the consumer countries of the Global North.

There is a fast-evolving policy agenda focused on leveraging global supply chain actors and their sustainability commitments to advance subnational jurisdictional programs (van Houten and De Koning 2018; Watts and Irawan 2018). This includes a multitude of approaches to scale up existing supply chain initiatives to cover entire jurisdictions or landscapes through the creation of “zero-deforestation zones” (Meyer and Miller 2015), “verified sourcing areas” (IDH 2018), and “jurisdictional sourcing” mechanisms (Boshoven et al. 2021). As part of this agenda, certification organizations are developing new standards and verification tools and are upscaling their auditing and traceability systems. For example, the RSPO, the leading global certification program for palm oil, is currently testing its jurisdictional certification system in several (sub)national jurisdictions in Ecuador, Indonesia, and Malaysia (RSPO 2021). Likewise, the International Social and Environmental Accreditation (ISEAL) Alliance, a meta-standard setter for private sustainability standards, recently published its good practice guidelines for making credible jurisdictional claims (ISEAL Alliance 2020).

Moreover, in 2021, Rainforest Alliance and Sustainable Trade Initiative (IDH) launched LandScale and SourceUp, respectively, two platforms that provide assessment methodologies, verification services, and online portals to connect global buyers of agricultural commodities to jurisdictional and landscape programs at the (sub)national level. Another major initiative is the Strategy for Collective Action in Production Landscapes of the CGF’s Forest Positive Coalition of Action, which brings together twenty-one of the world’s leading retailers and consumer goods manufacturers. Launched at the COP26 Climate Summit in Glasgow, the strategy aims to scale up twenty-two jurisdictional and landscape initiatives in Brazil, Chile, Indonesia, Malaysia, Mexico, and Russia (CGF Forest Positive Coalition of Action 2021).

As part of broader policy debates about the need for a “smart governance mix” for deforestation-free supply chains (see Schleifer and Fransen 2022), there are calls for linking subnational jurisdictional programs to emerging supply regulations in Northern consumer markets—though such approaches continue to be contested. Recently, the European Union enacted a new regulation for deforestation-free supply chains covering palm oil, soy, timber, cocoa, and other “forest-risk” commodities (EU Commission 2021). Once implemented, the regulation will establish mandatory due diligence obligations and traceability requirements on companies placing these commodities on the European market, and will include procedures to evaluate the level of risk of the exporting country or region. Given significant differences in the sustainability policies between subnational jurisdictions in Brazil, Indonesia, and other tropical forest countries, the JA community of practice

advocates for conducting these risk assessments at the subnational level (IDH and Proforest 2022; Trase 2022). The objective is to link demand-side supply chain regulations with supply-side subnational jurisdictional programs as part of a broader “smart mix of measures” (TFA 2021).

Linkages Through Domestic and Transnational Networks

Multiple networks have recently been formed that connect jurisdictional programs within and across countries. In terms of their overall design, purpose, and functionality, these networks bear some resemblance to municipal networks, such as those that exist in climate governance (e.g., Betsill and Bulkeley 2004; Gordon 2013). Global philanthropists, (e.g., David and Lucile Packard Foundation) similarly support the implementation of jurisdictional programs in several countries.¹² Among other activities, inter-jurisdictional networks facilitate learning between programs, support collective action, and provide meta-governance functions.

Some of these jurisdictional networks are of a distinctively domestic character. For example, in Indonesia, a Sustainable District Association (Lingkar Temu Kabupaten Lestari or LTKL) was launched in 2017, incorporating numerous district-level governments that are involved in jurisdictional programs. One of LTKL’s flagship programs has been formulating a regional competitiveness framework—a monitoring and reporting system to measure participating districts’ progress toward the Sustainable Development Goals (SDGs) (Nofyanza et al. 2020). A meta-governance instrument, the framework facilitates comparisons and learning between LTKL members. It also provides its members with a common language and the technical tools necessary to connect with global buyers of agricultural commodities, thus supporting the creation of linkages with private supply chain initiatives discussed in the previous subsection. Another example of a domestic jurisdictional network is the Sustainable Municipalities Program in Brazil, founded in 2014 to connect local municipalities with sustainable rural development agendas in the state of Mato Grosso. The Sustainable Municipalities Program was an important building block of PCI—Mato Grosso’s state-wide jurisdictional program (Milhorance and Bursztyn 2018, p. 15).

At the transnational level, the Governors’ Climate and Forests Task Force, or GCFTF, is the largest and most institutionalized inter-jurisdictional network on deforestation and low-emission rural development. Formed in 2008, the GCFTF brings together thirty-nine states and provinces from ten tropical forest countries. Among other activities, such as the facilitation of learning between members through annual meetings, technical exchanges, and the creation of a dedicated knowledge database, it supports its members in their applications for jurisdictional REDD+ funding (Duchelle et al. 2018, p. 5-6). In addition to other transnational networks, such as the Jurisdictional Exchange Network of the Tropical Forest Alliance, GCFTF is central to creating horizontal interactions between jurisdictional programs and the wider JA community of practice. However, research into GCFTF’s authority and legitimacy reveals multiple challenges and trade-offs, including the network’s limited ability to raise sufficient funds and to leverage the formal authority of its members to deliver climate action in local jurisdictions (Di Gregorio et al. 2020).

¹² For examples, see: https://www.packard.org/grants-and-investments/grants-database/?grant_keyword=jurisdictionandprogram_area=andaward_amount=andaward_year=.

Blind Spots

As this overview has shown, jurisdictional programs are involved in a multitude of “external” governance interactions that link these programs with international organizations, global supply chain initiatives, and through domestic and transnational jurisdictional networks. Yet research on this theme remains nascent, with transnational governance interactions involving subnational jurisdictions in the Global South being a particular important blind spot (Hickmann et al. 2020, p. 120). Against this background, two avenues for future research on JA interactions seem particularly promising. First, we need a systematic mapping of how evolving (sub)national jurisdictional programs fit into broader transnational regime complexes for climate change and forest governance (see Abbott 2012; Rodríguez Fernández-Blanco et al. 2019). And second, we need more empirical-analytical work to strengthen our understanding of how various external linkages with national and subnational jurisdictions are designed and function in practice. For example, little is known about the multitude of newly created governance intermediaries, such as LandScale, SourceUp, and the LEAF coalition, that aim to connect (sub)national jurisdictional programs to transnational private and intergovernmental policy instruments.

3.5 Impact and Effectiveness

JAs are relatively new modes of governance, so it is perhaps unsurprising that few ex-post formal evaluations of their impact or effectiveness exist. That said, after ten years, we would expect some clarity about how impact and effectiveness are being conceptualized and evaluated. Many publications nonetheless conclude that it is too soon to tell whether such approaches will reach their goals or contribute to global problem-solving (Fishman et al. 2017; Boshoven et al. 2021; Forster et al. 2021; Ingram et al. 2020; Von Essen and Lambin 2021). Other authors have pointed out the difficulty of comparative case study analysis due to variation in how different JAs are defined and conceptualized (see Section 3.1) (Garcia et al. 2021). But measuring JAs’ impact or effectiveness is challenging for several other reasons. Primary among those are questions surrounding the appropriate time horizon in which to expect an impact, especially given the complicated political processes involved; questions surrounding the appropriate goal metric to be evaluated; methodological challenges of establishing a counterfactual (what would have happened in the absence of such initiatives); and questions about what effects can or cannot be attributed to a JA, given their intention of coordinating many stakeholders and interacting with many other initiatives. Below, we first summarize these challenges before highlighting process and impact evaluations that have made first attempts at overcoming them. In contrast, we find relatively little critical reflection in the literature on potential unintended consequences and trade-offs associated with moving to this form of multi-stakeholder governance.

Measurement Challenges

In traditional impact evaluation procedures, a program’s impact is measured by assessing key indicators of change and then comparing baseline data (collected before the intervention began) to data collected after the intervention has taken place, allowing for an appropriate time lapse so that effects are likely observable. In addition, this change in indicators over time is then compared to a counterfactual by using experimental (e.g., by randomizing the intervention) or quasi-experimental methods. One example of this would be finding sufficiently similar comparison cases or using other statistical tools to isolate the true effects of the intervention from other contextual factors.

This process becomes complicated in the case of JAs due to three factors: determining appropriate timeframe, indicators, and methods. First, what is the appropriate timeframe after which to measure impacts? When has the intervention concluded, and how long will it take for the effects to be felt? Many of these approaches have ambitious goals of convening a wide range of stakeholders, negotiating common goals, and engaging in sensitive political processes of aligning policies and attracting investment. Such steps tend to be lengthy and prone to delays and breakdowns, especially given the political turnover of key officials (Schleifer 2023, p. 137-165). It is also difficult to determine a clear endpoint. While several JAs have set themselves time-bound, quantitative targets (Stickler et al. 2018), such goals may shift as the target date comes closer if insufficient progress has been made or steps had to be delayed for reasons outside of key actors' control (Grabs 2023; Grabs and Garrett 2023). More so than for other programs or policy changes, it is thus possible to argue that JAs' real impact will only be felt in a vaguely defined future and that, even after they have run for several years, it is too early to assess true impact.

Second, what are appropriate indicators to use to measure JAs' effectiveness? This, of course, depends on the intended goal or outcome—also a point of contention. At the broadest level, JAs have the goal of jurisdictional sustainability, which is the successful transition to sustainable development – encompassing social, environmental, and economic dimensions across an entire political geography (Schleifer 2023, p. 142). How this is operationalized depends on the jurisdictional approach and is often part of the JA process. The literature tends to focus on (mainly forest) ecosystem conservation to explain the rise of JAs (LTKL 2020; Garcia et al. 2021), but many JAs also aim to address land conflicts (Colchester et al. 2020b), achieve certification compliance (Colchester et al. 2020b), or emphasize other indicators. This means that intended outcome indicators of early jurisdictional programs may not yet be agreed on and, indeed, might be subject to intense political negotiations between relevant stakeholders. Additionally, some authors argue that JAs are often driven by a focus on the right process (e.g., multi-stakeholder engagement) more than specific ultimate goals (Van Houten and De Koning 2018) and should be evaluated with that intent in mind. Chervier et al. (2020)'s theory of change takes a middle ground by arguing that the most appropriate outcome to attribute to a JA is the “formalization of a consistent and locally adapted framework of operational and collective rules” (p. 4), which then may lead to the ultimate impact of interest, such as lower rates of deforestation.

Third, what are the appropriate methods to evaluate JAs? There is broad agreement that when assessing the impacts or effectiveness of a jurisdictional approach—in line with the definitions discussed above—the entire jurisdiction or political geography should be chosen as a unit of analysis (Pacheco et al. 2017; GIZ 2018; Colchester et al. 2020b). This, however, presents traditional impact evaluation methods with limitations, as it is often difficult to find comparable control cases that represent a credible counterfactual development of key indicators (Chervier et al. 2020). This is particularly true given the diversity of aims, interventions, and socioeconomic and politics contexts, as discussed above. Novel methods such as regression discontinuity design (RDD) along jurisdictional borders may address this challenge (Wüpper and Finger 2022). However, a potential unintended consequence of JAs is leakage—undesirable behavior such as deforestation being displaced across borders into neighboring jurisdictions where JAs are absent. Measuring a JA's impact by comparing deforestation inside its borders with deforestation outside of them, as RDD would do, could overestimate the real effect if leakage is not considered. Given the relatively large

unit of analysis, it is also comparatively difficult to attribute a causal effect to the activities of a jurisdictional approach, and to differentiate its effect from other socio-economic or political factors in the respective jurisdiction, such as weather patterns or commodity prices, especially considering that significant time lags may come into play before an impact can be noted (Seymour et al. 2020).

One final issue is the scale of data collection. The inclusivity and all-encompassing scope of JAs might make it promising to compare jurisdictional-level statistics over time. But these might hide local disparities and differential effects on various types of producers and other actors, such as those related to producer size, gender, ethnicity, or legal status. These metrics would only be visible via large-scale household surveys. Conducting such representative surveys across entire jurisdictions is likely to be resource intensive.

Evaluations in Practice

In practice, the above challenges have meant that assessments of JAs to date focus on qualitative case studies (e.g., Schleifer 2023, p. 137-165) that use process tracing or other narrative tools to attribute JA impacts or describe rather than analyse implementation or determine pathways of change. They tend to focus on processes and intermediate outcomes (e.g., degree of institutionalization of relevant initiatives) rather than final impacts (e.g., improvements in ecosystem conservation or poverty rates of local producers). They have also assessed a limited number of relatively easily measurable factors (e.g., deforestation rates) rather than complex socio-economic indicators.

For instance, to examine JA success, Forster et al. (2021) focus on policy adoption and local acceptance of action plans and programs. The factors of success they examine include participatory territorial assessment, multi-sector engagement, cross-sector coordination, transversal exchanges of landscape, territorial knowledge and data, and budgeting and investing in multi-level participation and capacity development. Boyd et al. (2018, p. 3) conclude in a broad review that “in the more advanced jurisdictions, JA[s] contributed to more robust multi-stakeholder processes and led directly to the adoption of policies and programs aimed at reducing emissions from deforestation and land use. [They] also provided an important framework for recent, ongoing experiments directed at preferential sourcing and jurisdictional certification of forest-risk commodities.” Others emphasize the selection of outcome indicators and the establishment of related performance monitoring tools and verification systems as an intermediary step toward goal attainment (Nepstad 2017; Palmer and Paoli 2017). This has been achieved in some cases. For example, the LTKL aims to measure jurisdictional sustainability performance of its district members via a tool called *Terpercaya* (Terpercaya 2018; Bishai et al. 2022). The PCI dashboard in Mato Grosso is another example. However, these indicators are rarely linked to an explicit theory of change that explains how the intervention affects the indicators in question (Chervier et al. 2020).

The most comprehensive framework to date to assess intermediate outcomes is the Climate, Community and Biodiversity Alliance’s (CCBA) Sustainable Landscapes Rating Tool (SLRT). The tool “rates governance conditions for sustainable landscapes against internationally recognized criteria, thereby focusing on process and enabling conditions rather than on outcomes” (Peteru et al. 2021, p. 2). It consists of 100 indicators in six sections: (1) land-use planning and management; (2) land and resource tenure; (3) biodiversity and other ecosystem services; (4) stakeholder coordination

and participation; (5) commodity production systems; and (6) institutional learning and development. Peteru et al. (2021) provide a comprehensive overview of the tool and apply it to 19 subnational jurisdictions across six countries (Brazil, Cote d'Ivoire, Ecuador, Indonesia, Mexico, and Peru) that are members of the Governors' Climate and Forests Task Force. The overview, however, only reflects on the efficacy of the tool rather than reporting or comparing results.

Regarding final impacts, scholars have focused on a limited number of (mainly environmental) indicators that can be compared at a large scale without the need for broad-level household surveys, such as deforestation rates. Stickler et al. (2018) report separately on policy/process outcomes and deforestation trends in 39 jurisdictions across 12 countries without aiming to establish causality. They conclude that “more than half of [the evaluated] jurisdictions have time-bound, quantitative targets related to commitments made for reducing deforestation, forest recovery, sustainable agriculture, and various socioeconomic factors” (p. 154) but also stress that “truly advanced policy and legal reforms – and other plans and actions – have taken place in just a few jurisdictions, including Acre, Mato Grosso, Jalisco and Sabah” (p. 158). Stickler et al. (2020) compare 30 first-order subnational jurisdictions in Brazil, Indonesia, Mexico, and Peru and assess each jurisdiction's progress toward the Rio Branco Declaration commitment to reduce deforestation by 80% by 2020 compared to national baselines. They find that “progress toward achieving the target was slow and likely unattainable in most jurisdictions outside of Brazil” (p. 1). The reasons they identify for the lagging process include inadequate global support on requested performance-based funding, private sector partnerships, and in developing straightforward metrics to access financing. In a comparison of two contrasting municipal-level case studies in the eastern Amazonian state of Pará, Brandão et al. (2020) identify several lessons from municipal-level JAs to halt deforestation. These include: (1) that strong government leadership is essential for progress; (2) that not all problems can be solved through the participation of diverse stakeholders and that a pragmatic trade-off between inclusiveness and effectiveness may be necessary; (3) that is not possible (and may even be counterproductive) to impose the same targets or expect the same rate and level of change across cases due to locally unique circumstances; and (4) that private financial support has still lagged behind expectations. In that context, the authors suggest that a “transparent and participatory monitoring system would also help local actors to communicate externally and to attract private investment that is truly engaged in promoting sustainability” (Brandão et al. 2020, p. 12). In sum, these qualitative assessments of JA effectiveness and impact to date provide useful analysis of specific case studies, but have generated few generalizable findings to date given the complexity and diversity of JAs.

Blind Spots

There are several areas in which more work is needed to better understand the effectiveness and impact of JAs. First, despite the existence of theories of change by Boshoven et al. (2021) and Chervier et al. (2020), most process and impact evaluations do not precisely spell out the underlying assumed causal logics that could allow for a more holistic assessment of the mechanisms of change. Second, few contributions integrate learnings from similar experiments, such as REDD+ initiatives, Integrated Landscape Approaches, or multi-stakeholder forums on land use change, despite the existence of substantial academic literature in this field (e.g., Irawan et al. 2019; Barletti et al. 2020; Carmenta et al. 2020). As mentioned above, there is important learning from such initiatives on

social inclusion and related impacts. Third, even when focusing on intermediate outcomes, some studies limit themselves to documenting activities that were pursued, rather than reflecting critically whether these processes aligned with the original goals and were appropriate (according to specific criteria such as equity or inclusivity). Finally, while most initial attempts at process or impact evaluation identify challenges or threats should a given jurisdictional initiative fail (e.g., Boyd et al. 2018; Von Essen and Lambin 2021), few critically engage with the possibility that a JA could succeed but create unintended or negative outcomes in terms of equality, power dynamics, livelihood outcomes, or ecosystem health. One of the few examples of this is Bastos Lima and Persson's (2020) assessment of the Cerrado Working Group. They conclude that "although effective for targeting conversion drivers, CCLG [commodity centric landscape governance] can crystallize and reinforce existing land use patterns by granting disproportionate power to dominant stakeholders, thus limiting the agenda to incremental changes" (Bastos Lima and Persson 2020, p. 1). Such perspectives should be highlighted more frequently.

4. Discussion

The sections above highlight numerous gaps in the literature related to conceptualizing JAs, inclusion and participation, socio-economic and political context, external governance interactions, and impact and effectiveness. Rather than restating those gaps here, this section will identify further cross-cutting themes that the JA literature needs to contend with; namely, power imbalances, political economy dynamics, and unintended outcomes.

4.1 Power Imbalances

Few JA studies place power imbalances and means to address them at the centre of their analysis. How these power imbalances shape inequalities, promote or prevent participation, and persist or wane is critical for ensuring JAs can achieve their stated sustainability and equity goals. That is not to say the literature does not recognize dynamics of power and contestation. On the contrary, power imbalances are widely acknowledged as potential barriers to both the effective operation of multi-stakeholder dialogue and to the political sustainability and legitimacy of JAs (Palmer and Paoli 2017).¹³ Nonetheless, most existing scholarship remains focused on less overtly political questions about the negotiation of shared goals and formalization of collective rules and institutions rather than questions about inequality, barriers to participation, and power struggles over rules and their implementation. That scholarship emphasizes these more practical questions rather than more abstract questions of power perhaps reflects the high number of practitioners contributing to it.

In exploring these power dynamics, we can learn lessons from broader critical political economy and political ecology scholarship on environmental governance. Global governance interventions such as JAs are inherently political in that they shift political outcomes and influence the distribution of both power and resources (Duffy 2006; Kohne 2014; Arts et al. 2017; Hameiri and Jones 2017; Bastos Lima and Persson 2020; Diprose et al. 2022). In practical terms, they highlight the importance of situating analysis of governance interventions like JAs within the power dynamics of a given place or sector. For example, understanding the power dynamics of a given JA requires relating it to the

¹³ Power dynamics are also frequently acknowledged in relation to power struggles between different levels of government (Minang et al. 2015) and between elite and marginalized stakeholder groups (Bastos Lima and Persson 2020).

specific political economies of relevant extractives sectors, land uses, and environmental management practices. We expect future research and evaluations of JAs to more explicitly address these political dynamics. This should include analysis of the coalitions that control or influence local power structures at the onset of a new JA. It should also include analysis of how JA implementation shapes or challenges political dynamics, and the implications this has for JA outcomes.

Systematic analysis of how social and political power shape conditions for JA success remain underdeveloped. As is mentioned above in Section 3.3, the literature does often acknowledge the importance of changes in local political leadership and administrations and competition between political parties. There is also some recognition of the challenge of institutionalizing global initiatives at the local level, including the sustainability of these initiatives as international funding ends. This is especially true in instances of weak institutional capacity, resourcing, and local political buy-in. There is, therefore, some recognition that the state is often central to the potential of JAs, notably in that it can introduce its own risks and challenges. Nonetheless, there is surprisingly little systematic empirical analysis of these power dynamics in JAs. More work is therefore needed to understand how power dynamics shape the conditions under which JAs are most likely to flourish. These perspectives are especially needed given recent findings that JAs face significant challenges due to political or political economy constraints. These challenges can include local political conflict or resistance, tensions between government ministries or levels of government, or the power and interests of established elites who benefit from the status quo.

To this end, useful lessons may be learned from studies of related sustainability initiatives (also mentioned above in the Sections 3.2 and 3.3) These analyses often pay significant attention to the local socio-economic and political relations that can enable or constrain the sustainability and inclusion goals of JAs. Extensive global governance, political economy, and political ecology literatures on environmental sustainability initiatives address these power dynamics, notably those about RSPO certification, landscape sustainability initiatives, and REDD+. They emphasize the importance of socioeconomic and political context, for example, through analysis of the perspectives and experiences of marginalized actors, by scrutinizing the legitimacy of various aspects of participation and inclusion, and by examining the power dynamics that might constrain or enable JAs. This research has also demonstrated that the ability of civil society and marginalized groups to influence governance initiatives depends on how inter-ethnic or group relations shape patronage networks, on access to resources or land rights, and on how production and workers are organized (e.g., Barientos and Smith 2007; Bridge 2008; Bebbington 2015; Diprose et al. 2022).

4.2 Political Economy Dynamics

There is also significant potential to draw from political economy frameworks surrounding the role of the state. For example, theoretical frameworks for political settlements and leadership coalitions have been productively used to analyze challenges with local political resistance in multi-scalar natural resource governance and development policy. Configurations of power and interests within domestic contexts often determine the scope of possible institutional arrangements governing extraction, production, or conservation (Bebbington et al. 2017). Such analyses also help to place JAs into a broader historical context, for example, by taking into account colonial legacies, histories of state formation, and patterns of extractives sector control by elite coalitions over time (e.g.,

Gellert 2010; Bebbington 2012; Hickey et al. 2015; Bebbington et al. 2017; Diprose et al. 2019, 2022; Diprose and Azca 2020, Winanti and Diprose, 2020).

These studies tend to show that in regions highly reliant on extraction, sustainability initiatives have limited success. They only tend to create change when they take advantage of windows of opportunity to build political will, but also that sustainability agendas are frequently captured or resisted by influential elites. For change to occur, political will needs to be aligned across governance levels. Interventions also need strategies to circumvent resistant powerful coalitions and reshape their incentive structures, often done incrementally (Barletti et al. 2020; Bastos Lima and Persson 2020; Diprose et al. 2022; Bahrudin et al. 2023). Related literatures have further explored how sustainability initiatives attempt to influence norms and regulatory environments. These attempts can create legitimacy contests among stakeholders seeking to influence policy, including transnational actors and the state itself. These contests occur through challenges to legitimacy claims as well as strategies of resistance, avoidance, or co-optation of legitimacy discourses (Oliver 1991; Black 2008; Glover and Schroeder 2017; Diprose et al. 2019). These political economy lenses can be useful for analyzing resistance to external agendas, notably international policymaking, and norms. They can help to identify leadership and coalition-building strategies to resist external influence.

4.3 Unintended Outcomes

As noted above, existing evaluations of impact and effectiveness neglect the possibility of unintended consequences stemming from a shift to JAs. Given the complexity of internal and external interactions in JAs, alongside persistent contestation about their aims, we would expect significant unanticipated consequences to arise. This includes outcomes that might be intended by some and unintended for others. Research into other forms of sustainability governance often highlights political contestation over the intended meaning and outcome of sustainability, but often through the lenses of procedural legitimacy rather than as a part of any kind of impact evaluation (Marin-Burgos et al. 2015; Levy et al. 2016). Evaluations of JAs that include the analysis of unintended negative outcomes could better capture otherwise neglected drivers of inequality and understated power dynamics. This could allow for more comprehensive, multi-dimensional understandings of the impact of JAs for both livelihoods and ecosystems. It is important to analyze not only a fixed or collectively agreed set of aims, but to also analyze which agendas and problems are dominating or crowding out others. For example, JAs may be addressing certain politically feasible and less costly problems while neglecting a range of more politically difficult, deeply entrenched environmental, social, or rights-based issues that require greater resources and political capital. The size, scope, and ambition of many JAs means they can have considerable impacts, so a more thorough discussion and analysis of potential unintended outcomes is needed in the literature.

Identifying clear causal logics associated with such complex, long-term, and multi-dimensional processes is immensely challenging. Many process and impact evaluations do not clearly specify a theory of change, which would allow scholars to better identify and investigate various causal mechanisms. This challenge is compounded by the evolutionary nature of JAs, as practitioners learn from and adapt to evolving opportunities and constraints in complex and dynamic environments. Intermediate indicators of progress are frequently revised, but must still be incorporated into longer-term measures of impact and effectiveness. Large bodies of research have examined the challenges of evaluating long-term and complex processes of policy intervention and social change, from which

useful lessons could be learned. These lessons include various evaluation frameworks, including in international development policy, public policy processes, and international policy agendas relating to sustainability transformations.

5. Conclusion

To some extent, the gaps in analysis highlighted above can be attributed to the novelty of JAs and scholarship of them. They are, inevitably, therefore, an issue of much work remaining to be done. Some of the more notable gaps unsurprisingly reflect questions, methodologies, and interests of the disciplinary fields in which scholarship is currently located. There is a clear lack of extensive research coming from political economy and comparative politics perspectives, which contributes to the underdeveloped state of the literature on themes relating to the role of the state, power imbalances, and interactions with domestic policy processes.

Much existing work is also authored or co-authored by practitioners, so it tends to be action-oriented rather than reflective or critical. The emphasis to date has therefore been largely on how JAs can operate more effectively and attain more resources, often at the expense of a more systematic probing of their limitations and obstacles to greater progress. The novelty of the field is therefore not only about a simple lack of empirical data to enable assessments of impact. Rather, those writing on JAs are understandably seeking to intervene with their analysis in ways that are broadly constructive and supportive of the project of advancing JAs to sustainable commodity production. This raises questions about how and to what extent the critical questions we are highlighting can or should be approached in a similarly constructive spirit. Regardless, there is a clear need for greater intellectual diversity in the JA literature.

This intellectual diversity also needs to include methodological diversity given the relatively limited range of employed methods in the literature to date. As noted above, most studies rely on a single case study analysis and interview data to explore the implementation and effectiveness of JAs. While this approach has provided valuable insight, there is a need to expand the methodological repertoire to include quantitative analyses, comparative studies, and interdisciplinary research to gain a more holistic understanding of sustainable commodity governance's challenges and opportunities. By embracing diverse methodological approaches, scholars can foster a more comprehensive and nuanced understanding of the complexities involved in implementing JAs, identifying best practices, and enabling evidence-based policy recommendations. Social network analysis is particularly promising for studying the complex interactions between JAs, public programs, and private initiatives across scales. Network analysis can improve our understanding of interdependencies between overlapping JAs, areas in which JAs fail to promote stakeholder interactions, and to better map the range of internal and external interactions involved in these complex arrangements. It can help to provide a clearer picture of the intricate web of relationships and interactions among stakeholders involved in JAs, including governments, private sector actors, NGOs, and local communities. It can enable a deeper understanding of power dynamics, information flows, and collaborative networks within and across jurisdictions, providing insight into the social, economic, and political factors that shape sustainable commodity governance. This deeper understanding can contribute to the development of innovative strategies for fostering multi-stakeholder cooperation and collective action in addressing sustainability challenges within commodity supply chains.

There are also challenging questions here about how to conceptualize and evaluate initiatives that are not complete programs with tangible deliverables. JAs by design never reach an end state in which they have achieved their aims. They are ongoing processes. There often appears to be an “old wine in new bottles” phenomenon in development and sustainability work (and other policy domains). If an approach shows limited effectiveness, there is a tendency for practitioners to rally around an alternative idea with great enthusiasm and quite a lot of goodwill by researchers, based on a logic of “let them try it and see how it works.” This approach raises the risk of a boom-and-bust cycle of interventions. This in turn raises questions about whether this cyclical approach remains an acceptable way of responding to the present planetary emergency, or whether there is a need for more urgent systemic change and a clear prioritization of certain outcomes over others (Cashore 2023). JAs could perhaps be more generously interpreted as experiments to scale up and coordinate sustainable resource governance, with the potential to catalyze broader processes rather than thinking of them through a discrete program design lens. But where there is continual shapeshifting of the initiatives—where they are perpetually emerging, complex, and changing—what are the implications for design and evaluation, and how should actors conceptualize political strategies to build supportive coalitions and networks? In contexts in which deep contestation and disagreement about aims and approaches is intense, in which aims are never likely to be fully or even mostly realized, this raises difficult questions about whether we need a different way of thinking about aims, success, and failure, and to rethink design and evaluation considering this. Such rethinking is essential to tackle the broader question of what, exactly, is the potential value of JAs as a concept and form of governance in addressing environmental and social problems. More systematic empirical research alongside a sharply critical analytical lens will be needed to tackle persistent questions regarding if and how these highly complex governance mechanisms can ultimately contribute something new to improving conditions on the ground.

References

- Abbott, K. W., 2012. The Transnational Regime Complex for Climate Change. *Environment and Planning C: Government and Policy*, 30(4), 571-590. <http://dx.doi.org/10.1068/c11127>
- Abbott, K.W., Genschel P., Snidal D., and Zangl, B., 2015. *Orchestration: Global Governance through Intermediaries*, in: Abbott, K.W., Genschel, P., Snidal, D., and Zangl, B (Eds.), *International Organizations as Orchestrators*, Cambridge University Press, Cambridge, 3-37. <http://dx.doi.org/10.2139/ssrn.2125452>
- Affiff, S. A., 2016. REDD, Land Management and the Politics of Forest and Land Tenure Reform with Special Reference to the Case of Central Kalimantan Province, in: McCarthy, J.F. and Robinson, K., (Eds.), *Land and Development in Indonesia: Searching for People's Sovereignty*. ISEAS, Singapore, 113–140. <https://doi.org/10.1355/9789814762106-010>
- Alvarado, L. B., 2021. Social Aspects of the Pilot Project for Jurisdictional Certification of the Ecuadorian Amazon: a preliminary review. *Forest Peoples Programme*. <https://www.forestpeoples.org/sites/default/files/documents/Jurisdiction-Certification-ENG-v07%28for%20publishing%29.pdf> (accessed 26 September 2023).
- Angelsen, A. with Brockhaus, M., Kanninen, M., Sills, E., Sunderlin, W. D. and Wertz-Kanounnikoff, S. (Eds.), 2009. *Realising REDD+: National Strategy and Policy Options*. Center for International Forestry Research, Bogor, Indonesia. ISBN: 978-6-02-869303-5
- Angelsen, A., Brockhaus, M., Sunderlin, W.D., and Verchot, L.V. (Eds.), 2012. *Analysing REDD+: Challenges and Choices*. Center for International Forestry Research, Bogor, Indonesia. ISBN: 978-602-8693-80-6
- Arts, B., Buizer, M., Horlings, L., Ingram, V., Van Oosten, C., and Opdam, P., 2017. Landscape Approaches: A State-of-the-art Review. *Annual Review of Environment and Resources*, 42(1), 439-463. <http://dx.doi.org/10.1146/annurev-environ-102016-060932>
- Bahrudin, Macdonald, K., Diprose, R., and Delgado, D., 2023 (forthcoming). *Scaling-up Sustainable Commodity Governance through Jurisdictional Initiatives: Political Pathways to Sector Transformation? World Development [under review]*.
- Barletti, J. P. S., Larson, A. M., Hewlett, C., and Delgado, D., 2020. Designing for Engagement: A Realist Synthesis Review of How Context Affects the Outcomes of Multi-stakeholder Forums on Land Use and/or Land-use Change. *World Development*, 127, 104753. <https://doi.org/10.1016/j.worlddev.2019.104753>
- Bartley, T., 2018. *Rules Without Rights: Land, Labor, and Private Authority in the Global Economy*. Oxford: Oxford University Press. ISBN: 9780198794332

- Barrientos, S., and Smith, S., 2007. Do Workers Benefit from Ethical Trade? Assessing Codes of Labour Practice in Global Production Systems. *Third World Quarterly*, 28(4), 713–729. <http://dx.doi.org/10.1080/01436590701336580>
- Bastos Lima, M. G., and Persson, M., 2020. Commodity-Centric Landscape Governance as a Double-Edged Sword: The Case of Soy and the Cerrado Working Group in Brazil. *Frontiers In Forests and Global Change*, 3(27). <https://doi.org/10.3389/ffgc.2020.00027>
- Bebbington, A. (Ed.), 2012. *Social Conflict, Economic Development and Extractive Industries: Evidence from South America*. Routledge, London. ISBN: 9780415710718
- Bebbington, A., 2015. Political Ecologies of Resource Extraction: Agendas Pendientes. *European Review of Latin American and Caribbean Studies*, 100, 85-98. <http://dx.doi.org/10.18352/erlacs.10121>
- Bebbington, A., Arond, E., and Dammert, J.L., 2017. Explaining Diverse National Responses to the Extractive Industries Transparency Initiative in the Andes: What Sort of Politics Matters? *The Extractive Industries and Society*, 4(4), 833-841. <http://dx.doi.org/10.1016/j.exis.2016.11.005>
- Bernstein, S., and Cashore, B., 2012. Complex Global Governance and Domestic Policies: Four Pathways of Influence. *International Affairs*, 88(3), 585–604. <http://dx.doi.org/10.1111/j.1468-2346.2012.01090.x>
- Betsill, M. M., and Bulkeley, H., 2004. Transnational Networks and Global Environmental Governance: The Cities for Climate Protection Program. *International Studies Quarterly*, 48(2), 471-493. <http://dx.doi.org/10.1111/j.0020-8833.2004.00310.x>
- Bishai, N., Sirait, H. and Pedroza-Arceo, N. M., 2022. Landscape and Jurisdictional Approaches in Indonesia Policy Brief. CDP. https://cdn.cdp.net/cdp-production/cms/reports/documents/000/006/098/original/Indonesia_Policy_Brief_2021_EN_final.pdf?1643196152 (accessed 26 September 2023).
- Black, J., 2008. Constructing and Contesting Legitimacy and Accountability in Polycentric Regulatory Regimes. *Regulation and Governance*, 2(2), 137–164. <http://dx.doi.org/10.1111/j.1748-5991.2008.00034.x>
- Blomquist, W., 2009. Multi-level Governance and Natural Resource Management: The Challenges of Complexity, Diversity, and Uncertainty, in: Beckmann, V. and Padmanabhan, M., (Eds.), *Institutions and Sustainability: Political Economy of Agriculture and the Environment--Essays in Honour of Konrad Hagedorn*, 109-126. Springer, New York. ISBN: 978-1-4020-9689-1
- Boshoven, J., Fleck, L. C., Miltner, S., Salafsky, N., Adams, J., Dahl-Jørgensen, A., Fonseca, G., Nepstad, D., Rabinovitch, K. and Seymour, F., 2021. Jurisdictional Sourcing: Leveraging Commodity Supply Chains to Reduce Tropical Deforestation at Scale. A Generic Theory of

Change for a Conservation Strategy, v 1.0. *Conservation Science and Practice* 3(5), e383. <https://doi.org/10.1111/csp2.383>.

Boyd, W., Stickler, C., Duchelle, A. E., Seymour, F., Nepstad, D., Bahar, N. H. A. and Rodriguez-Ward, D., 2018. Jurisdictional Approaches to REDD+ and Low Emissions Development: Progress and Prospects, World Resource Institute, Working Paper, June 2018(1). <https://wriorg.s3.amazonaws.com/s3fs-public/ending-tropical-deforestation-jurisdictional-approaches-redd.pdf> (accessed 26 September 2023).

Brandão, F., Piketty, M.G., Pocard-Chapuis, R., Brito, B., Pacheco, P., Garcia, E., Duchelle, A. E., Drigo, I. and Carvalho Peçanha, J., 2020. Lessons for Jurisdictional Approaches From Municipal-Level Initiatives to Halt Deforestation in the Brazilian Amazon. *Frontiers in Forests and Global Change* 3(96). doi: 10.3389/ffgc.2020.00096.

Bridge, G., 2008. Global Production Networks and the Extractive Sector: Governing Resource Based Development. *Journal of Economic Geography*, 8(3), 389–419. <http://dx.doi.org/10.1093/jeg/lbn009>

Brockhaus, M., Obidzinski, K., Dermawan, A., Laumonier, Y., and Luttrell, C., 2011. An Overview of Forest and Land Allocation Policies in Indonesia: Is the Current Framework Sufficient to Meet the Needs of REDD+? *Forest Policy and Economics*, 18, 30-37. <http://dx.doi.org/10.1016/j.forpol.2011.09.004>

Buchanan, A. J., Durbin, J., McLaughlin, D., McLaughlin, L., Thomason, K., and Thomas, M., 2019. Exploring the Reality of the Jurisdictional Approach as a Tool to Achieve Sustainability Commitments in Palm Oil and Soy Supply Chains. *Conservation International: Washington DC*. https://www.conservation.org/docs/default-source/publication-pdfs/summary-report-exploring-the-reality-of-the-jurisdictional-approach.pdf?Status=Master%26sfvrsn=52208c3_5 (accessed 26 September 2023).

Carmenta, R., Coomes, D. A., DeClerck, F. A. J., Hart, A. K., Harvey, C. A., Milder, J., Reed, J., Vira, B., and Estrada-Carmona, N., 2020. Characterizing and Evaluating Integrated Landscape Initiatives. *One Earth*, 2(2), 174-187. <http://dx.doi.org/10.1016/j.oneear.2020.01.009>

Cashore, B., 2023. The Private Sector Engagement Paradox: The Proliferation of Finance and Market Driven Sustainability Tools Alongside the Acceleration of Environmental Degradation, in: D. D'Amato, A. Toppinen, and R. Kozak (Eds.), *The Role of Business in Global Sustainability Transformations*, Routledge, London, 119-147. ISBN: 9781003003588.

Cashore, B., Knudsen, J. S., Moon, J., and Van der Ven, H., 2021. Private Authority and Public Policy Interactions in Global Context: Governance Spheres for Problem Solving. *Regulation and Governance*, 15(4), 1166-1182. <http://dx.doi.org/10.1111/rego.12395>

- CGF Forest Positive Coalition of Action, 2021. Strategy for Collective Action in Production Landscapes: Version 1.0. <https://jaresourcehub.org/wp-content/uploads/2021/11/FPC-Landscape-Strategy-2021.pdf> (accessed 26 September 2023).
- Chervier, C., Piketty, M. G., and Reed, J., 2020. A Tentative Theory of Change to Evaluate Jurisdictional Approaches to Reduced Deforestation. *Frontiers in Forests and Global Change* 3 (119). doi: 10.3389/ffgc.2020.498151.
- Colchester, M., 2020. Preliminary Findings from a Review of the Jurisdictional Approach Initiative in Sabah. Forest Peoples Programme. <https://www.forestpeoples.org/sites/default/files/documents/Case%20study%20-%20Sabah%20Preliminary%20findings%20-%20Jun%202020.pdf> (accessed 26 September 2023).
- Colchester, M., Kleden, E., Sukma, D., Jiwan, N., Storey, H., and Barragán Alvarado, L., 2020a. Upholding Human Rights in Jurisdictional Approaches Some Emerging Lessons. Forest Peoples Programme. <https://www.forestpeoples.org/sites/default/files/documents/Upholding%20Human%20Rights%20in%20Jurisdictional%20Approaches%20Jun2020.pdf> (accessed 26 September 2023).
- Colchester, M., Kleden, E., and Sukma, D., 2020b. Preliminary Findings from a Review of the Jurisdictional Approach Initiative in Seruyan, Central Kalimantan, Indonesia. Forest Peoples Programme. <https://www.forestpeoples.org/sites/default/files/documents/Case%20study%20-%20Seruyan%20Preliminary%20findings%20-%20Jun%202020.pdf> (accessed 26 September 2023).
- DiGiano, M., Stickler, C., and David, O., 2020. How Can Jurisdictional Approaches to Sustainability Protect and Enhance the Rights and Livelihoods of Indigenous Peoples and Local Communities? *Frontiers in Forests and Global Change*, 3(40). <http://dx.doi.org/10.3389/ffgc.2020.00040>
- Di Gregorio, M., Massarella, K., Schroeder, H., Brockhaus, M., and Pham, T. T., 2020. Building Authority and Legitimacy in Transnational Climate Change Governance: Evidence from the Governors' Climate and Forests Task Force. *Global Environmental Change*, 64, 102126. <http://dx.doi.org/10.1016/j.gloenvcha.2020.102126>
- Diprose, R., and Azca, M.N., 2020. Conflict Management in Indonesia's Post-authoritarian Democracy: Resource Contestation, Power Dynamics and Brokerage. *Conflict, Security and Development*, 20(1), 191-221. <http://dx.doi.org/10.1080/14678802.2019.1705074>
- Diprose, R., Kurniawan, N and Macdonald, K., 2019. Transnational Policy Influence and the Politics of Legitimation. *Governance*, 32, 223-240. <http://dx.doi.org/10.1111/gove.12370>

- Diprose, R., Kurniawan, N., Macdonald, K. and Winanti, P.S., 2022. Regulating Sustainable Minerals in Electronics Supply Chains: Local Power Struggles and the ‘Hidden Costs’ of Global Supply Chain Governance. *Review of International Political Economy*, 29(3), 792-817.
<http://dx.doi.org/10.1080/09692290.2020.1814844>
- Duchelle, A. E., Seymour, F., Brockhaus, M., Angelsen, A., Larson, A. M., Moeliono, M., Wong, G. Y., Pham, T. T., and Martius, C., 2018. REDD+: Lessons from National and Subnational Implementation, World Resource Institute, Working Paper, June 2018.
<https://wriorg.s3.amazonaws.com/s3fs-public/ending-tropical-deforestation-redd-lessons-implementation.pdf> (accessed 26 September 2023).
- Duffy, R., 2006. The Potential and Pitfalls of Global Environmental Governance: The Politics of Transfrontier Conservation Areas in Southern Africa. *Political Geography*, 25, 89-112.
<http://dx.doi.org/10.1016/j.polgeo.2005.08.001>
- EU Commission, 2021. Proposal for a Regulation on Deforestation-Free Products, COM(2021) 706 final, Brussels, 17.11.2021. https://ec.europa.eu/environment/publications/proposal-regulation-deforestation-free-products_en (accessed 26 September 2023).
- Fishman, A., Oliveira, E. and Lloyd, G., 2017. Tackling Deforestation Through a Jurisdictional Approach: Lessons from the Field, WWF report. WWF.
https://files.worldwildlife.org/wwfcmprod/files/Publication/file/7kzew5kv7i_wwf_jurisdictional_approaches_fullpaper_web_1.pdf (accessed 26 September 2023).
- Forster, T., Penagos, A., Scherr, S., Buck, L., and Ramirez, E., 2021. Territorial Approaches for Sustainable Development: Stocktaking on Territorial Approaches – Experiences and Lessons. GIZ.
<https://www.giz.de/de/downloads/Territorial%20Approaches%20for%20Sustainable%20Development.pdf> (accessed 26 September 2023).
- Furumo, P. R., and Lambin, E. F., 2021. Policy Sequencing to Reduce Tropical Deforestation. *Global Sustainability* 4, E24. doi: 10.1017/sus.2021.21.
- Garcia, M., Coletti, F., Banhe, A., Souza, G., and Ouro, A., 2021. Jurisdictional Approaches: an Analysis of Brazil's States and Companies Contribution. CDP. <https://jaresourcehub.org/wp-content/uploads/2021/07/CDP-Jurisdictional-Approaches-An-analysis-of-Brazils-states-and-companies-contribution-Mar-2021.pdf> (accessed 26 September 2023).
- Garrett, R. D., Levy, S. A., Gollnow, F., Hodel, L., and Rueda, X., 2021. Have Food Supply Chain Policies Improved Forest Conservation and Rural Livelihoods? A Systematic Review. *Environmental Research Letters*, 16(3), 033002. <http://dx.doi.org/10.1088/1748-9326/abe0ed>
- Gellert, P.K., 2010. Rival Transnational Networks, Domestic Politics and Indonesian Timber. *Journal of Contemporary Asia*, 40(4), 539-567.
<http://dx.doi.org/10.1080/00472336.2010.507041>

- Glover, A., and Schroeder, H., 2017. Legitimacy in REDD+ Governance in Indonesia. *International Environmental Agreements: Politics, Law and Economics*, 17, 695-708.
<http://dx.doi.org/10.1007/s10784-016-9341-x>
- Gollnow, F., Cammelli, F., Carlson, K.M. and Garrett, R.D., 2022. Gaps in Adoption and Implementation Limit the Current and Potential Effectiveness of Zero-deforestation Supply Chain Policies for Soy. *Environmental Research Letters*, 17(11), p.114003.
<http://dx.doi.org/10.1088/1748-9326/ac97f6>
- GIZ, 2018. Enhancing Accessibility of Information on Jurisdictional Approaches to Reducing Deforestation and Sustainable Development. GIZ. Unpublished document.
- Gordon, D. J., 2013. Between Local Innovation and Global Impact: Cities, Networks, and the Governance of Climate Change. *Canadian Foreign Policy Journal*, 19(3), 288-307.
<http://dx.doi.org/10.1080/11926422.2013.844186>
- Grabs, J., 2023. A Theory of Credible Cross-temporal Corporate Commitments as Goal-based Private Sustainability Governance. *Business Strategy and the Environment*, 1-15.
<https://doi.org/10.1002/bse.3423>
- Grabs, J., and Garrett, R. D., 2023. Goal-Based Private Sustainability Governance and Its Paradoxes in the Indonesian Palm Oil Sector. *Journal of Business Ethics*, 2023.
<https://doi.org/10.1007/s10551-023-05377-1>
- Grant, M. J., and Booth, A. (2009). A Typology of Reviews: An Analysis of 14 Review Types and Associated Methodologies. *Health Information and Libraries Journal*, 26(2), 91–108.
<https://doi.org/10.1111/j.1471-1842.2009.00848.x>
- Hameiri, S., and Jones, L., 2017. Beyond Hybridity to the Politics of Scale: International Intervention and ‘Local’ Politics. *Development and Change*, 48(1), 54-77.
<http://dx.doi.org/10.1111/dech.12287>
- Hickey, S., Bukenya, B., Izama, A. and Kizito, W., 2015. The Political Settlement and Oil in Uganda. ESID Working Paper No. 48. University of Manchester, Manchester. ISBN: 978-1-908749-48-2
- Hickmann, T., Van Asselt, H., Oberthür, S., Sanderink, L., Widerberg, O., and Zelli, F., 2020. Institutional Interlinkages, in: F. Biermann and R. E. Kim (Eds.), *Architectures of Earth System Governance: Institutional Complexity and Structural Transformation*. Cambridge University Press, Cambridge, 119-13. <https://doi.org/10.1017/9781108784641.006>
- Hovani, L., Cortez, R., Hartanto, H., and Thompson, I., and Fishbein, G., Madeira, E., and Adams, J., 2018a. The Role of Jurisdictional Programs in Catalyzing Sustainability Transitions in Tropical Forest Landscapes. <https://doi.org/10.13140/RG.2.2.34252.67205>

- Hovani, L., Varns, T., Hartano, H., Rahman, S., Makinuddin, N. and Cortez, R., 2018b. Jurisdictional Approaches to Sustainable Landscapes: Berau and East Kalimantan, Indonesia. The Nature Conservancy, Arlington, USA. <https://doi.org/10.13140/RG.2.2.11150.82242>
- IDH, 2018. Verified Sourcing Areas (VSAs). <https://www.idhsustainabletrade.com/uploaded/2018/08/VSA-concept-note.pdf> (accessed 26 September 2023).
- IDH, 2021. SourceUp: A Collaboration Platform for Supply Chain Sustainability at Scale. <https://www.idhsustainabletrade.com/approach/sourceup/> (accessed 26 September 2023).
- IDH and Proforest, 2022. EU Regulation on Deforestation-free Products Recommendations for a Forest Positive Impact. https://www.proforest.net/fileadmin/uploads/proforest/Photos/Publications/IDH_Forest_Positive_Options_Policypaper.pdf (accessed 26 September 2023).
- Ingram, V., Behagel, J., and Mammadova, A., and Verschuur, X., 2020. The outcomes of deforestation-free commodity value chain approaches. Wageningen University and Research. <https://doi.org/10.13140/RG.2.2.10664.19207>.
- Irawan, S., Widiastomo, T., Tacconi, L., Watts, J. D. and Steni, B., 2019. Exploring the Design of Jurisdictional REDD+: The Case of Central Kalimantan, Indonesia. *Forest Policy and Economics* 108:101853. <https://doi.org/10.1016/j.forpol.2018.12.009>.
- ISEAL Alliance, 2020. Making Credible Jurisdictional Claims, ISEAL Good Practice Guide, Version 1.0, October 2020. <https://www.isealalliance.org/get-involved/resources/making-credible-jurisdictional-claims-good-practice-guide-v10-2020>. (accessed 26 September 2023).
- Kohne, M., 2014. Multi-stakeholder Initiative Governance as Assemblage: Roundtable on Sustainable Palm Oil as a Political Resource in Land Conflicts Related to Oil Palm Plantations. *Agriculture and Human Values*, 31(3), 469-480. <http://dx.doi.org/10.1007/s10460-014-9507-5>
- Lambin, E. F., Gibbs, H. K., Heilmayr, R., Carlson, K. M., Fleck, L. C., Garrett, R. D., le Polain de Waroux, Y., McDermott, C. L., McLaughlin, D., Newton, P., Nolte, C., Pacheco, P., Rausch, L. L., Streck, C., Thorlakson, T., and Walker, N. F., 2018. The Role of Supply-Chain Initiatives in Reducing Deforestation. *Nature Climate Change*, 8(2), 109-116. <https://doi.org/10.1038/s41558-017-0061-1>
- Larson, R. K., Osbeck, M., Dawkins, E., Tuhkanen, H., Nguyen, H., Nugroho, A., Gardner, T. A., Zulfahm, and Wolvekamp, P., 2018. Hybrid governance in agricultural commodity chains: Insights from implementation of ‘No Deforestation, No Peat, No Exploitation’ (NDPE) policies in the oil palm industry. *Journal of Cleaner Production*, 183, 544-554. <http://dx.doi.org/10.1016/j.jclepro.2018.02.125>

- Leaf Coalition. (n.d.). Emergent Signs Six New Agreements with Brazilian States and Forest Countries. <https://emergentclimate.com/six-brazilian-states-and-forest-countries-sign-leaf-agreements/> (accessed 26 September 2023).
- Levy, D., Reinecke, J., and Manning, S., 2016. The Political Dynamics of Sustainable Coffee: Contested Value Regimes and the Transformation of Sustainability. *Journal of Management Studies*, 53(3), 364-401. <http://dx.doi.org/10.1111/joms.12144>
- Lingkar Temu Kabupaten Lestari (LTKL), 2019. Developing Food and Agriculture in RPJMN 2020-2024 with the Jurisdictional Approach for Sustainability. Lingkar Temu Kabupaten Lestari. <https://jaresourcehub.org/wp-content/uploads/2020/09/FINAL-Nota-Konsep-JA-Bappenas-ENG-CLEAN.pdf> (accessed 26 September 2023).
- Lingkar Temu Kabupaten Lestari (LTKL), 2020. Mapping Commitment of Subnational Government To Sustainable Land Use In Southeast Asia. Tropical Forest Alliance. https://jaresourcehub.org/wp-content/uploads/2021/02/Buku_LTKL-TFA-Report_Final.pdf (accessed 26 September 2023).
- Marin-Burgos, V., Clancy, J. S., and Lovett, J. C., 2015. Contesting Legitimacy of Voluntary Sustainability Certification Schemes: Valuation Languages and Power Asymmetries in the Roundtable on Sustainable Palm Oil in Colombia. *Ecological Economics*, 117, 303–313. <http://dx.doi.org/10.1016/j.ecolecon.2014.04.011>
- McCarthy, J.F., 2004. Changing to Gray: Decentralization and the Emergence of Volatile Socio-legal Configurations in Central Kalimantan, Indonesia. *World Development*, 32(7), 1199-1223. <http://dx.doi.org/10.1016/j.worlddev.2004.02.002>
- Meyer, C., and Miller, D., 2015. Zero Deforestation Zones: The Case for Linking Deforestation-Free Supply Chain Initiatives and Jurisdictional REDD+. *Journal of Sustainable Forestry*, 34(6-7), 559-580. <http://dx.doi.org/10.1080/10549811.2015.1036886>
- Milhorance, C., and Bursztyn, M., 2018. Emerging Hybrid Governance to Foster Low-emission Rural Development in the Amazon Frontier. *Land Use Policy*, 75, 11-20. <http://dx.doi.org/10.1016/j.landusepol.2018.03.029>
- Minang, P. A., Van Noordwijk, M., Freeman, O. E., Mbow, C., de Leeuw, J., and Catacutan, D., 2015. Climate-smart Landscapes: Multifunctionality in Practice. ASB Partnership for The Tropical Forest margins. <https://apps.worldagroforestry.org/downloads/Publications/PDFS/B17753.pdf> (accessed 26 September 2023).
- Molenaar, J.W., Gorter, J., Heilbron, L., Simons, L., Vorley, B., Blackmore, E., and Dallinger, J., 2015. Sustainable Sector Transformation How to Drive Sustainability Performance in Smallholder-Dominated Agricultural Sectors. Aidenvironment, New Foresight, IIED, Commissioned by IFC: Amsterdam, The Netherlands. ISBN: 9781784311605

- Mwangi, E., and Wardell, A., 2012. Multi-level Governance of Forest Resources. *International Journal of the Commons*, 6(2), 79-103. <https://www.jstor.org/stable/26523097> (accessed 3 october, 2023).
- Nepstad, D., Irawan, S., Bezerra, T., Boyd, W., Stickler, C., Shimada, J., Carvalho, O., MacIntyre, K., Dohong, A., Alencar, A., Azevedo, A., Tepper, D. and Lowery, S., 2013. More Food, More Forests, Fewer Emissions, Better Livelihoods: Linking REDD+, Sustainable Supply Chains and Domestic Policy in Brazil, Indonesia and Colombia. *Carbon Management* 4(6), 639-658. doi: 10.4155/cmt.13.65.
- Nepstad, D. C., 2017. Jurisdictional Sustainability: A Primer for Practitioners. Earth Innovation Institute. https://www.gcftf.org/wp-content/uploads/2020/12/jurisdictional_sustainability_primer_en.pdf (accessed 26 September 2023).
- Newton, P., and Benzeev, R., 2018. The Role of Zero-deforestation Commitments in Protecting and Enhancing Rural Livelihoods. *Current Opinion in Environmental Sustainability*, 32, 126-133. <http://dx.doi.org/10.1016/j.cosust.2018.05.023>
- New Foresight, 2018. 'Beyond Certification': Two Approaches that Shape the Agenda. [https://mailchi.mp/cb0550148729/newforesight-update-beyond-certification-two-promising-approaches?e=\[UNIQID\]](https://mailchi.mp/cb0550148729/newforesight-update-beyond-certification-two-promising-approaches?e=[UNIQID]) (accessed 26 September 2023).
- Nofyanza, S., Moeliono, M., Selviana, V., Dwisatrio, B., Liswanti, N., Tamara, A., and Komalasari, M., 2020. Revisiting the REDD+ Experience in Indonesia: Lessons from National, Subnational and Local Implementation. Info brief 314, December 2020, Center for International Forestry Research (CIFOR). https://www.cifor.org/publications/pdf_files/infobrief/7880-infobrief.pdf (accessed 26 September 2023).
- Nolte, C., de Waroux, Y.L.P., Munger, J., Reis, T.N., and Lambin, E.F., 2017. Conditions Influencing the Adoption of Effective Anti-deforestation Policies in South America's Commodity Frontiers. *Global Environmental Change*, 43, 1-14. <http://dx.doi.org/10.1016/j.gloenvcha.2017.01.001>
- Oliver, C., 1991. Strategic Responses to Institutional Processes. *Academy of Management Review*, 16(1), 145–179. <http://dx.doi.org/10.2307/258610>
- Pacheco, P., Hospes, O., and Dermawan, A., 2017. Zero Deforestation and Low Emissions Development: Public and private Institutional Arrangements Under Jurisdictional Approaches. Wageningen University and Research. <https://edepot.wur.nl/432566> (accessed 26 September 2023).
- Pacheco, P. Bakhtary, H., Camargo, M., Donofrio, S., Drigo, I., and Mithöfer, D., 2018. The Private Sector: Can Zero Deforestation Commitments Save Tropical Forests? In: Angelsen A., Martius

- C., De Sy V., Duchelle A. E., Larson A. M. and Pham T. T., (Eds.), Transforming REDD+: Lessons and new directions. CIFOR, Bogor, Indonesia, 161–173. ISBN: 978-602-387-079-0.
- Palmer, B., and Paoli, G., 2017. Jurisdictional Approaches to Sustainable Land Use in Indonesia; What is It, Why Pursue It and How to Build One. Daemeter.
http://daemeter.org/new/uploads/20171128145054.Jurisdictional_Approaches.pdf (accessed 26 September 2023).
- Paoli, G., Palmer, B., Schweithelm, J., Limberg, G., and Green, L., 2016. Extended Summary. Jurisdictional Approaches to Reducing Palm Oil Driven Deforestation in Indonesia: A Scoping Study of Design Considerations and Geographic Priorities. Daemeter, Bogor, Indonesia.
http://daemeter.org/new/uploads/20161105234503.DAEMETER_extended_summary_Final.pdf (accessed 26 September 2023).
- Peteru, S., Duchelle, A. E., Stickler, C., Durbin, J., Luque, C., and Komalasari, M., 2021. Participatory Use of a Tool to Assess Governance for Sustainable Landscapes. *Frontiers in Forests and Global Change*, 4(1). <http://dx.doi.org/10.3389/ffgc.2021.507443>
- Pirard, R., Fishman, A., Gnych, S., Obidzinski, K., and Pacheco, P., 2015. Deforestation-free Commitments: The Challenge of Implementation—An Application to Indonesia (Vol. 181). CIFOR. <https://doi.org/10.17528/cifor/005572>
- Proforest, 2020. Siak Pelalawan Landscape Programme: How Companies Collaborate and Engage. <https://jaresourcehub.org/wp-content/uploads/2020/09/plp-briefing-note-3-1.pdf> (accessed 26 September 2023).
- Reed, J., Ickowitz, A., Chervier, C., Djoudi, H., Moombe, K., Ros-Tonen, M., Yanou, M., Yuliani, L., and Sunderland, T., 2020. Integrated Landscape Approaches in the Tropics: A Brief Stock-Take. *Land Use Policy*, 99, 104822. <http://dx.doi.org/10.1016/j.landusepol.2020.104822>
- Resosudarmo, I.A.P., Stibniati, A., Ekaputri, A.D., Intarini, D.Y., and Indriatmoko, Y., 2013. Does Tenure Security Lead to REDD+ Project Effectiveness? Reflections from Five Emerging Sites in Indonesia. *World Development*, 55, 68-83. <https://doi.org/10.1016/j.worlddev.2013.01.015>
- Rodríguez Fernández-Blanco, C., Burns, S. L., and Giessen, L., 2019. Mapping the Fragmentation of the International Forest Regime Complex: Institutional Elements, Conflicts and Synergies. *International Environmental Agreements: Politics, Law and Economics*, 19(2), 187-205.
<http://dx.doi.org/10.1007/s10784-019-09434-x>
- RSPO, 2021. RSPO Jurisdictional Approach Pilot Framework, Approved by RSPO Standard Standing Committee on 8 July 2021. <https://jaresourcehub.org/wp-content/uploads/2021/10/rspo-jurisdictional-approach-piloting-framework-eng.pdf> (accessed 26 September 2023).
- Schleifer, P., 2023. *Global Shifts: Business, Politics, and Deforestation in a Changing World Economy*. MIT Press, Cambridge, MA. ISBN: 9780262545532.

- Schleifer, P., and Fransen, L., 2022. Towards a Smart Mix 2.0: Harnessing Regulatory Heterogeneity for Sustainable Global Supply Chains, SWP Working Paper, Research Network Sustainable Global Supply Chains, WP NR. 04 August 2022. https://www.swp-berlin.org/publications/products/arbeitspapiere/WP04_SmartMix2.0_Schleifer_Fransen.pdf (accessed 26 September 2023).
- Seymour, F. J., and Busch, J., 2016. Why Forests? Why Now? The Science, Economics, and Politics of Tropical Forests and Climate Change. Center for Global Development. ISBN: 978-1-933286-85-3.
- Seymour, F. J., Aurora, L. and Arif, J., 2020. The Jurisdictional Approach in Indonesia: Incentives, Actions, and Facilitating Connections. *Frontiers in Forests and Global Change* 3(124). doi: 10.3389/ffgc.2020.503326
- Sills, E.O., Atmadja, S.S., de Sassi, C., Duchelle, A.E., Kweka, D.L., Resosudarmo, I.A.P. and Sunderlin, W.D. (Eds.), 2014. REDD+ on the Ground: A Case Book of Subnational Initiatives Across the Globe. CIFOR, Bogor, Indonesia. ISBN: 978-602-1504-55-0
- Stickler, C., Duschelle, A. E., S. C. D., Nepstad, D., and Ardila, J. P., 2018. Sub-national Jurisdictional Approaches: Policy Innovation and Partnerships for Change, in: Dalam Angelsen A., Martius C., Duchelle A. E., Larson A. M., De Sy V., Dan Pham T. T., (Eds.), *Transforming REDD+: Lessons and new directions*, 145-159. https://www.cifor.org/publications/pdf_files/Books/BAngelsen180112.pdf (accessed 26 September 2023).
- Stickler, C., David, O., Chan, C., Ardila, J. P., and Bezerra, T. 2020. The Rio Branco Declaration: Assessing Progress Toward a Near-Term Voluntary Deforestation Reduction Target in Subnational Jurisdictions Across the Tropics. *Frontiers in Forests and Global Change*, 3. <https://doi.org/10.3389/ffgc.2020.00050>
- Tacconi, L., Mahanty, S. and Suich, H. (Eds.), 2010. *Payments for Environmental Services, Forest Conservation and Climate Change: Livelihoods in the REDD?* Edward Elgar, Cheltenham. ISBN: 978 1 84980 299 4
- Tacconi, L., 2012. Redefining Payments for Environmental Services. *Ecological Economics*, 73(1), 29-36. <http://dx.doi.org/10.1016/j.ecolecon.2011.09.028>
- TFA, 2020. Collective Position Paper on EU Action to Protect and Restore the World's Forests: Proposal for a "Smart Mix" of Measures. <https://www.theconsumergoodsforum.com/wp-content/uploads/2020/12/TFA-EU-Position-Paper-201209.pdf> (accessed 26 September 2023).
- Trase, 2022. Strengthening the EU Regulation on Deforestation-Free Products, March 2022. <https://insights.trase.earth/insights/strengthening-the-eu-regulation-on-deforestation-free-products/> (accessed 26 September 2023).

- Terpercaya, 2018. Making the Transition to Sustainable Agricultural Production: A Practical Guidebook For District Governments in Indonesia.
<https://efi.int/sites/default/files/files/flegredd/Terpercaya/Other%20resources/Making%20the%20transition%20to%20sustainable%20agricultural%20production.pdf> (accessed 26 September 2023).
- Tseng, T. W. J., Robinson, B. E., Bellemare, M. F., Yishay, A. B., Blackman, A., Boucher, T., Childress, M., Holland, M. B., Kroeger, T., Linkow, B., Diop, M., Naughton, L., Rudel, T., Sanjak, J., Shyamsundar, P., Veit, P., Sunderlin, W., Zhang W., and Masuda, Y. J., 2021. Influence of Land Tenure Interventions on Human Well-being and Environmental Outcomes. *Nature Sustainability*, 4, 242-251. <https://doi.org/10.1038/s41893-020-00648-5>
- Umunay, P., Lujan, B., Meyer, C., and Cobián, J., 2018. Trifecta of Success for Reducing Commodity-driven Deforestation: Assessing the Intersection of REDD+ Programs, Jurisdictional Approaches, and Private Sector Commitments. *Forests*, 9(10), 609. <http://dx.doi.org/10.3390/f9100609>
- Van Houten, H., and De Koning, P., 2018. Jurisdictional Approaches for Deforestation-Free and Sustainable Palm Oil on Borneo. Leiden: Mekon Ecology, Support Unit of the AD Partnership. <https://mekonecology.net/wp-content/uploads/2018/12/Mekon-Ecology-2018-Jurisdictional-Approaches-Borneo.pdf> (accessed 26 September 2023).
- Von Essen, M., and Lambin, E. F., 2021. Jurisdictional Approaches to Sustainable Resource Use. *Frontiers in Ecology and the Environment* 19(3), 159-167. <https://doi.org/10.1002/fee.2299>
- Watts, J. D., and Irawan, S., 2018. Leveraging Agricultural Value Chains to Enhance Tropical Tree Cover and Slow Deforestation. The World Bank, Background Paper December 2018. https://www.profor.info/sites/profor.info/files/LEAVES_SynthesisReport_PROFOR_2018.pdf (accessed 26 September 2023).
- Winanti, P.S. and Diprose, R., 2020. Reordering the Extractive Political Settlement: Resource Nationalism, Domestic Ownership and Transnational Bargains in Indonesia. *The Extractive Industries and Society*, 7(4), 1534-1546. <http://dx.doi.org/10.1016/j.exis.2020.08.015>
- Wolosin, M., 2016. WWF Discussion Paper: Jurisdictional Approaches to Zero Deforestation Commodities. https://wwfint.awsassets.panda.org/downloads/wwf_jurisdictional_approaches_to_zdcs_nov_2016.pdf (accessed 26 September 2023).
- Wunder, S., 2009. Can Payments for Environmental Services Reduce Deforestation and Forest Degradation? In: Angelsen, A. with Brockhaus, M., Kanninen, M., Sills, E., Sunderlin, W.D. and Wertz-Kanounnikoff, S., (Eds.), *Realising REDD+: National Strategy and Policy Options*, 213-223. Center for International Forestry Research, Bogor, Indonesia. ISBN: 978-6-02-869303-5

Wüpper, D.J. and Finger, R., 2022. Regression Discontinuity Designs in Agricultural and Environmental Economics. *European Review of Agricultural Economics*, 50(1), 1. <http://dx.doi.org/10.1093/erae/jbac023>