REDD+ benefit sharing in Ethiopia: policy and stakeholder perceptions analysis

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HIGHLIGHTS

- Most Ethiopian REDD+ stakeholders at the federal level interviewed agreed that benefits should be shared according to efforts made in reducing deforestation and forest degradation.
- In contrast, federal government policies and laws on benefit sharing are generally pro-poor, with emphasis on legal rights to receive benefits.
- Although most stakeholders support the government's vision for a benefit-sharing mechanism, the majority of interviewees also highlighted
 major challenges in implementing a REDD+ benefit-sharing mechanism, including a lack of awareness and knowledge of REDD+; a lack
 of technical expertise in monitoring carbon emissions and sequestration; a lack of clear tenure and user rights; weak coordination amongst
 stakeholders; contradictions between laws and regulations; and high transaction costs.
- Multiple ideas of fairness can pose practical challenges for the implementation of REDD+ benefit sharing in Ethiopia. This should be addressed, e.g., through establishment of an open and inclusive dialogue and establishing a learning mechanism to initiate and improve regulations, processes and mechanisms over time.
- Although country stakeholders often tend to rush on the selection of or discussion on who should be paid, it is the legitimacy of the decision-making that counts. The decision needs to be based on participatory decision-making process which take into account different actors' voices, concerns and interests.

SUMMARY

Current Ethiopian policies and laws recognize the importance of equitable benefit-sharing mechanisms for natural resource management. The question of 'what is fair' is often unclear in practice. We pursue this question in the context of benefit sharing for Reducing Emissions from Deforestation and Forest Degradation (REDD+) in Ethiopia. We present findings from interviews conducted in 2017 with 33 national REDD+ actors, and a review of national policies and laws until 2020 to understand Ethiopia's policy and legal framework, and vision for a REDD+ benefit-sharing mechanism. Our findings show that Ethiopia is progressing in developing a benefit-sharing mechanism (BSM) for REDD+. Government policies on benefit sharing are pro-poor with an emphasis on legal rights. Among the various concepts of fairness, more stakeholders agreed that benefits should be shared according to efforts made to reduce deforestation and forest degradation rather than being based on poverty or legal rights. Left unattended, we believe this divergence of opinion on 'what is fair' opens the potential for questions regarding the legitimacy of the REDD+ BSM among stakeholders in general and can pose practical implementation challenges. We suggest that establishing open dialogue, learning mechanisms and inclusive processes can lead to regulations, policies and procedures that clarify and harmonize the different views on fairness over time.

Keywords: REDD+, finance, safeguards, policy, Ethiopia

Partage des bénéfices de la REDD+ en Ethiopie: analyse de la politique ainsi que des perceptions des parties-prenantes

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Les lois et politiques éthiopiennes actuelles reconnaissent l'importance de mécanismes d'un partage des bénéfices équitable pour la gestion des ressources naturelles. La question: «qu'est-ce qui est juste?» manque bien souvent de clarté en pratique. Nous poursuivons cette question dans le contexte du partage des bénéfices de la Réduction des émissions provenant de la déforestation et de la dégradation des forêts (REDD+) en Ethiopie. Nous présentons les résultats d'interviews conduites en 2017 auprès de 33 acteurs nationaux de la REDD+, et une analyse des lois et politiques nationales jusqu'à 2020, pour comprendre le cadre politique et légal de l'Ethiopie, et sa vision pour un mécanisme de partage des bénéfices de la REDD+. Les politiques gouvernementales de partage des bénéfices sont sensibles aux démunis, avec un accent sur les droits légaux. Parmi plusieurs concepts de justice, plus de parties-prenantes s'accordent sur le fait que les bénéfices devraient être partagés suivant les efforts faits pour réduire la déforestation et la dégradation forestière, plutôt que selon la pauvreté ou les droits légaux. Si elle n'est pas suivie, nous estimons que cette divergence d'opinion sur «ce qui est juste» débouchera sur de questions quant à la légitimité de la REDD+ BSM chez les parties-prenantes en général, et pourrait ériger des défis face à la mise en application pratique. Nous suggérons que l'établissement d'un dialogue ouvert, un apprentissage de mécanismes et des processus inclusifs peuvent conduire à des règles, des politiques et des procédés pouvant clarifier et harmoniser les différents points de vue sur la justice au fil du temps.

Distribución de los beneficios de REDD+ en Etiopía: análisis de políticas y de las percepciones de las partes interesadas

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Las políticas y leyes actuales de Etiopía reconocen la importancia de los mecanismos de reparto equitativo de beneficios para la gestión de los recursos naturales. La cuestión de 'lo que es justo' a menudo no está clara en la práctica. Este artículo investiga esta cuestión en el contexto de la distribución de los beneficios de la Reducción de las Emisiones de la Deforestación y la Degradación de Bosques (REDD+) en Etiopía. El artículo presenta los resultados de las entrevistas realizadas en 2017 a 33 partes interesadas nacionales de REDD+ y una revisión de las políticas y leyes nacionales hasta 2020, con el fin de entender el marco político y legal de Etiopía, y la visión de un mecanismo de distribución de los beneficios de REDD+. Los resultados muestran que Etiopía está avanzando en el desarrollo de un mecanismo de distribución de beneficios (MDB) para REDD+. Las políticas gubernamentales sobre la distribución de beneficios favorecen a los pobres y hacen hincapié en los derechos legales. Entre los diversos conceptos de equidad, fueron más las partes interesadas que coincidieron en que los beneficios deberían repartirse en función de los esfuerzos realizados para reducir la deforestación y la degradación de los bosques, en lugar de basarse en la pobreza o en los derechos legales. Si no se pone atención a esto, se cree que esta divergencia de opiniones sobre 'lo que es justo' abre la posibilidad de que se cuestione la legitimidad en general del MDB de REDD+ entre las partes interesadas y que se puedan plantear problemas en su aplicación práctica. Se sugiere que el establecimiento de un diálogo abierto, de mecanismos de aprendizaje y de procesos inclusivos puede conducir a reglamentos, políticas y procedimientos que clarifiquen y armonicen en el futuro los diferentes puntos de vista sobre la equidad.

INTRODUCTION

Reducing Emissions from Deforestation and Forest Degradation (REDD+) was conceptualized as an international strategy where developed countries would compensate developing countries for conserving their forests, thereby reducing deforestation emissions. REDD+ could be applied at a national or sub-national scale. National approaches are by definition implemented at a national-level jurisdiction. Subnational approaches, in turn, can refer to a project, program, or a subnational jurisdiction. While we are aware of the multi-level architecture of REDD+, this paper focuses on national policies that guide how REDD+ is implemented at subnational levels.

Since the early days of REDD+, the sharing of this compensation has been a source of debate. As results-based payment (RBP) mechanisms are being established and funds start to flow to REDD+ countries such as Ethiopia, policymakers and practitioners are increasingly pressed to answer complex questions around a benefit-sharing mechanism, like who pays, who gets paid what, and how? Many answers to these questions depend on the country's financial, political and economic system, and stakeholders' perceptions on issues like fairness. Designing a benefit-sharing mechanism requires an understanding of benefits (monetary and non-monetary), costs (opportunity, transaction and implementation costs), structure and distribution of incentives and benefits, beneficiaries and safeguards (Chapman et al. 2014). Without this understanding, the resulting benefit-sharing mechanism can fail to deliver and meet actors' interests in participating in REDD+ and lead to further deforestation (Angelsen et al. 2018).

Benefit-sharing mechanisms are country-specific and are shaped by the interplay between the global, national, and subnational political and economic systems as well as the sectors and actors involved, stakeholders' perceptions, ideologies, and the extent to which stakeholders believe a benefit-sharing mechanism will achieve equity (Wynberg and Hauck 2014). REDD+ benefit-sharing mechanisms, in particular, are shaped

by existing discourses on REDD+ benefit sharing, used by different policy actors to advocate for certain benefit-sharing options, and the underlying assumptions and political contexts that drive these discourses (Wong *et al.* 2019). These actors' views, and the interaction between them as shaped by experiences, power relation and imbalances, remain the central reason for benefits being distributed in the way that they are (Ravikumar *et al.* 2015, Wynberg and Hauck 2014).

REDD+ implementation in Ethiopia is coordinated at the federal level, with activities and institutions operating at subnational jurisdictions (e.g., regional states and districts/woreda) and projects (FDRE 2018b). Hence, perceptions of 'what is fair?' across these different levels are likely to differ, and these differences may create friction in future implementation of benefit sharing. At the local level, perceptions of equity in benefit sharing from conservation programs in Ethiopia differ according to age, gender and social status. Those with less power, access to land, and access to information, notably women and youth, feel more left out of benefits from such programs (Abebe et al. 2020).

In contrast to stakeholders at the local level, perceptions of stakeholders at the federal levels, however, are influenced by and reflected in different programs, policies and laws. Ethiopia envisions a Climate Resilient Green Economy (CRGE) where, the country will be carbon neutral by 2030 (Hiron et al. 2018) with forest restoration and management essential for achieving this vision (FDRE 2011a). The government realized that the business-as-usual path of development would worsen the level of degradation of natural resources. Hence, discouraging expansion of agriculture, protecting, and properly managing existing forests and woodlands, and establishing new forests through afforestation and reforestation are also key policy and measures on climate change mitigation and adaptation for the government and donors. Equity is not explicitly discussed in the CRGE document but is an underlying theme with a focus on promoting rural economic development. Ensuring gender equality was mentioned particularly in the context of fuel-efficient cookstoves as a means of reducing forest degradation.

The government pledged to rehabilitate 15 million ha of degraded landscapes by 2025 as part of the Bonn Challenge, a pledge that was increased to 22 million at the 2014 UN Climate Summit in New York (Kassa et al. 2017). Ethiopia's Intended Nationally Determined Contribution (INDC) expressed the country's commitment to reduce national GHG emissions by 64% by 2030 compared to the business-as-usual (BAU) scenario (FDRE 2017). In 2020, the country updated its Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC). The country is committing to reduce economywide greenhouse gas (GHG) emissions by 12.4% in 2030 compared to a business-as-usual scenario, using its domestic resources. This would represent a 51.1 MtCO2eq reduction, limiting GHG emissions at 360.85 MtCO2eq in 2030 (compared to a BAU emission level of 412 MtCO2eq). The emissions reduction target could be further increased to 53.5% with financial backing from the international community; this would limit GHG emissions to 242.8 MtCO2eq, i.e., 220.6 MtCO2eq less than the BAU scenario (UNFCCC 2020). REDD+ is an important means to mobilize international finance for achieving Ethiopia's NDCs.

To meet these objectives, Ethiopia plans to address existing policy and institutional gaps (FDRE 2017). Ethiopia has an annual deforestation rate of 0.54% (FDRE 2016), and has a large expanse of deforested lands, degraded forest areas and degraded lands. REDD+ is expected to play a significant role in achieving Ethiopia's NDC as well as the CRGE strategy. In 2018, the country published its National REDD+ Strategy (FDRE 2018b). The forestry sector, with REDD+ as its major mitigation lever, is expected to contribute 50% of the total emissions reduction. REDD+ is also expected to contribute to CRGE goals of achieving net zero emissions by 2030. The country started engaging in REDD+ in 2008, marked by the submission of a Letter of Intent and REDD+ Readiness Plan Program Idea Note (R-PIN) to the World Bank's Forest Carbon Partnership Facility (FCPF). This has evolved into the implementation of regional REDD+ programs in Oromia, Amhara, Tigray and Southern Nations, Nationalities and Peoples (SNNP) regions, and an emission reductions payment agreement (ERPA) for results in the Oromia program. Financial contributions from donor countries such as Norway, the United Kingdom, Sweden and the US has helped Ethiopia gain the capacity necessary to implement REDD+ at the national and subnational levels.

Unlike in the CRGE, issues of equity and benefit sharing are explicitly integrated into the REDD+ agenda, possibly due to due to the important financial role international funders have in shaping the process. The national REDD+ strategy adopts several principles relevant for equitable benefit sharing, notably Equity ("REDD+ contributes to sustainable and equitable development by strengthening the livelihoods of forest-dependent communities."); Transparency ("REDD+ activities are transparently undertaken to ensure a clear and easy to understand implementation process for all stakeholders."); and Accountability ("REDD+ implementation is fully

accountable to the people and Government of Ethiopia and the international community in terms of relevance, process, funding, and results obtained") (FDRE 2018b: 23).

The Government of Ethiopia claims that the absence of a clear benefit-sharing mechanism that defines the distribution of benefits from forest management has impeded REDD+ implementation in the country (MEFCC 2017a, 2017b). Experiences of how to share benefits from REDD+ initiatives are expected to offer useful lessons in designing Ethiopia's national benefit-sharing mechanism. Indeed, various afforestation/reforestation and REDD+ projects in Ethiopia date back to 2003 (Simonet et al. 2020). These include projects that have gone through carbon certification and received payments from carbon markets, such as the Bale Mountains Ecoregion (398,532 ha), registered under the Voluntary Carbon Standard (VCS) and CCBS Gold Standard in 2017 (Verra 2019a, 2019b), which has since retired (sold) more than 150,000 carbon credits as of 18 December 2020 (https://registry.verra.org/app/search/VCS). Another project, the Humbo Ethiopia Assisted Natural Regeneration Project, went through the Clean Development Mechanism and retired more than 13,000 units of Certified Carbon Emission Reductions. At the jurisdictional level, the Oromia Forested Landscape Program (OFLP) has entered into a results-based payment agreement under the BioCarbon ISFL program (https://www.biocarbonfund-isfl.org/). This program covers 32 million ha, of which nine million are forests. Through BioCarbon ISFL, OFLP receives USD 18 million in grant financing, with potential payments for up to 10 million tons of emission reductions (BioCF n.d.). However, no mechanism on how to implement benefit sharing is being implemented on the ground.

In this paper we examine existing legal and stakeholder perspectives on benefit-sharing mechanisms and reflect on the implications of these perspectives for the design and implementation of REDD+ benefit-sharing mechanisms.

CONCEPTUAL FRAMEWORK AND METHODS

Conceptual framework

REDD+

REDD+ was originally conceived as a "performance-based" mechanism that could provide access to cash payments or carbon credits. In its implementation, however, it has been funded mostly through multilateral and bilateral donors as development aid. REDD+ was also originally expected by many countries to be a significant source of benefits for developing countries, and a mechanism that promises efficient, effective and equitable distribution of REDD+ benefits is therefore a necessity in accordance with the Paris agreement (Pham *et al.* 2018).

REDD+ will be implemented in a diverse range of contexts with activities governed and/or occurring at multiple levels (i.e., ranging from changes in national policies to direct actions at specific sites). Underlying political and economic

factors drive the design of REDD+ benefit-sharing mechanisms the different levels of jurisdictions. The complex interplay between these multilevel contexts can exert considerable influence over the outcomes of REDD+ and its benefit-sharing mechanisms (Wong *et al.* 2019).

In the REDD+ literature, there are multiple definitions of a benefit-sharing mechanisms. Pham *et al.* (2013) view a benefit-sharing mechanism as a variety of institutional means, governance structures and instruments for distributing finance and other benefits. Ribot and Peluso (2003) analyse benefit-sharing mechanisms as social processes or institutions through which people gain access to and control over resources and through which benefits are distributed. Benefit sharing can aim at introducing greater social responsibility (Jenkins 2004, Merino and Valor 2011) but can also be used as a development tool, and in many cases without an interrogation of the roots of the problem (Altman 2009).

We combine Wong *et al.* (2019)'s framework in examining benefit-sharing mechanisms by analysing the structures (objective and policies) of a REDD+ benefit-sharing mechanism and the broader institutional and policy contexts underlying forest governance; and Wynberg and Hauck (2014)'s framework which views benefit-sharing mechanisms as the division and distribution of monetary and non-monetary benefits in a way that has equitable outcomes and is procedurally fair.

Equity

Equity is a major concern but not easily measured. The prevalent rationales on equity in REDD+ argue that benefits should go to: those with legal rights over forests; forest stewards who have been managing forests; those incurring costs as a consequence of REDD+; effective facilitators of REDD+ implementation; and the poor (Luttrell *et al.* 2013). In practice, these rationales are not distinct from each other, but rather interweave in ways that reflect socio-political values and current policy objectives. Equity is also relational and understood differently in different countries and between different stakeholders (Pham *et al.* 2014). Furthermore, equity is determined more by perceptions rather than actual measurements (Wong *et al.* 2016). Therefore, to consider equity as central to a benefit-sharing mechanism, there is a need to understand how stakeholders perceive and think about equity.

Equity might be considered from three inter-related dimensions: distributive, procedural and contextual. Distributive equity addresses the outcomes of resource management (allocation of costs and benefits). Procedural equity refers to decision making, i.e., the process by which actions are formulated and implemented. Contextual equity combines distributive and procedural equity (Agrawal and Gupta 2005, Sherpa and Brower 2016), and recognizes that the pre-existing social, political and economic conditions in a community can limit or facilitate people's access to decision-making procedures, resources and benefits, and contribute to the degree of (in) equity prevailing (Costenbader *et al.* 2015, Di Gregorio *et al.* 2013, Mahanty *et al.* 2006, McDermott *et al.* 2013, Sherpa and Brower 2016, Wong *et al.* 2016).

This paper focuses on the contextual aspect of equity as expressed in several discourses of benefit sharing, particularly the question of who should be paid. What is written in the policies and legal framework on REDD+ benefit sharing is compared with stakeholders' perceptions on how this should be arranged. Power, policies and laws may in effect benefit certain actors more than others. Setting up national rules on how benefits should be distributed can therefore have significant impacts at the local level, which may be juxtaposed with the realities and needs of marginalized communities (Nelson 2010, Ruddle and Hickey 2008). According to the National REDD+ Secretariat (MEFCC 2015), Ethiopia's national benefit-sharing mechanism aims to contextualize the extensive geographic areas, traditional cultures, socio-economic situations, livelihood patterns and other related factors to guide benefit sharing in all communities across the country. This government entity also acknowledges that the national benefit-sharing mechanism requires consultation in all regions as their aspirations, concerns, equity issues, interests, contexts and requirements vary, and a national benefitsharing mechanism will draw key principles, frameworks and agreed options for the respective regions and communities' consideration. The process of determining who should be paid, as well as the centrality of processes in shaping actors' involvement in benefit-sharing interventions and their outcomes, is critical to ensuring the effectiveness of benefit sharing and securing a legitimate and equitable outcome (Hernes et al. 2005). The study draws on the work of Chapman et al. (2014), Luttrell et al. (2013), Pham et al. (2013) and Wong et al. (2017, 2019), who have all identified discourses on benefit sharing. Six of the main discourses on REDD+ benefit sharing are examined to determine the dominant perceptions in Ethiopia:

- 1. REDD+ benefits should mostly go to actors with legal rights (Luttrell *et al.* 2013);
- 2. REDD+ benefits should mostly go to actors that actually reduce emissions (Chapman *et al.* 2014);
- 3. REDD+ benefits should mostly go to those that have already been conserving forests (forest stewards) (Luttrell *et al.* 2013);
- 4. REDD+ benefits should mostly go to those bearing the costs of REDD+ (e.g., opportunity costs) (Luttrell *et al.* 2013);
- 5. REDD+ benefits should mostly go to effective facilitators of implementation (Chapman *et al.* 2014, Luttrell *et al.* 2013);
- 6. REDD+ benefits should mostly go to the poor and the marginalized (Luttrell *et al.* 2013, Pham *et al.* 2013, Wong *et al.* 2019).

Although country stakeholders often tend to rush on the selection of or discussion over one discourse on the other, it is the legitimacy of the decision making that counts. The selection of discourse needs to be based on participatory decision-making process which take into account different actors' voices, concerns and interests.

Methods

Data was collected between January and December 2017 using a mixed method of literature review and an empirical survey.

Literature review

We conducted a literature review of national policy and legal frameworks on benefit-sharing mechanisms in general, and on the REDD+ benefit-sharing mechanism in Ethiopia. The review is used to characterize the government's perspective on benefit-sharing mechanisms, as well as opportunities and challenges to develop a REDD+ benefit-sharing mechanism in Ethiopia. Policies, including those on benefit-sharing mechanisms, forest law and REDD+ policies, were reviewed and analysed. The literature review also aims to understand whether the REDD+ documents are consistent with or supported by relevant laws or existing legal frameworks in the country.

Survey of national policy actors

We interviewed REDD+ actors at the federal level, where actors are defined as "organizations that define themselves and are perceived by others as relevant to the national REDD+ policy domain" (Brockhaus and Di Gregorio 2012, Brockhaus *et al.* 2014). In this study we only focussed on national-level actors located in the capital city of Addis Ababa. Actors were selected in a two-phase approach. First, a comprehensive list of actors was compiled based on a review of relevant literature, including peer-reviewed articles, publicly available government and NGO reports, workshop attendance lists, and so on. This list was then validated by an expert panel comprised of four experts from REDD+ secretariats and representatives of NGOs. Through this process, 41 organizations were

TABLE 1 Interviewed actors

Actor groups	Social organization survey participants	Semi- structured interviews with organizational actors
Central government	5	1
Regional government	1	0
National research and academic institutions	6	4
Private sector	3	1
National NGOs	3	0
International NGOs	3	1
International organizations	4	1
Donors	2	0
Transnational organizations	4	0
National professional associations	2	0
Total	33	8

identified as key and active organizations in Ethiopia's REDD+ policy arena. In 2017, these 41 organizations were contacted, and 33 of 41 (80%) were interviewed (Table 1). Individual actors representing their organizations were mostly senior experts; the rest were middle-level experts. Interviews were designed to understand organizational mandates, how organization representatives view the functioning of REDD+ and its concrete deployment on the ground, the organization's involvement in REDD+, and the actors' perceptions of the opportunities and challenges for a REDD+ benefit-sharing mechanism in Ethiopia.

The survey consisted of two parts: a structured organizational survey followed by a semi-structured interview. The organizational survey covered organizational stances on REDD+ issues based on statements to which interviews responded according to a Likert scale. For this paper, we focused on statements related to benefit sharing. The semi-structured interviews provided more in-depth discussions on challenges and opportunities of REDD+ and equity aspects. Survey data was entered into a Microsoft Access database and exported to Microsoft Excel for data analysis. Analysis was done through simple tabulations and comparison. The recorded semi-structured interviews were transcribed and analysed using NVivo, a Computer Assisted Qualitative Data Analysis Software (CAQDAS).

ETHIOPIA'S LEGAL AND POLICY FRAMEWORK ON BENEFIT SHARING

Overall legal and policy framework on benefit sharing

International law and policies framework

Benefit sharing is interpreted in international law as an international obligation, a right, and a safeguard mechanism (Morgera 2017). International laws also refer to benefit sharing mechanism as human rights instruments on indigenous people (Morgera 2018, Jalleta 2021).

The issue of a benefit-sharing mechanism was first discussed when Ethiopia ratified the Convention on Biological Diversity in 1994. The Government of Ethiopia also adopted the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) in September 2015. Ethiopia proactively mainstreamed and aligned the SDGs with its Second Growth and Transformation Plan (GTP II), which spanned from 2015–2016 to 2019–2020. The country is currently formulating a 10-year perspective development plan for the period 2019–2020 to 2029–2030, which is fully aligned with the 2030 agenda and Sustainable Development Goals (SDGs). However, up to 2020, Ethiopia had neither ratified ILO Convention 169 nor was it present during the voting on the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). When examining the effectiveness of translating international law on access and benefit sharing (ABS) in a domestic policy context in Ethiopia, Jalleta (2021) found that benefit sharing related to genetic resources in Ethiopia is entirely monetary, is limited to national-regional State apparatus, and excludes indigenous peoples from any benefits.

National law and policy framework

Since 1994, numerous domestic environmental and conservation policies have been developed by the Government of Ethiopia, with a strong focus on developing principles and a legal framework to support an equitable benefit-sharing mechanism (Table 2). These policies have adopted different approaches to distributing benefits across different groups, but underpinning them are three major discourses: i) benefits of communities and women's groups should be protected (Discourse 6), as seen in the second Growth and Transformation Plan (GTP II) and Access to Genetic Resources and Community Knowledge, and Community Rights Proclamation

No. 482 /2006; (ii) benefits should go to land stewards (Discourse 3), for example the Draft National Seed Policy (MoA 2019); and (iii) benefits should go to all actors who contribute towards policy outcomes (Discourse 5), for example, the National Biodiversity Strategy and Action Plan 2005.

Existing policies show strong recognition of the need to have an equitable and adaptive benefit-sharing mechanism for natural resources management in Ethiopia based on agreements between the State and local people (see Table 3). There is an outstanding question of how Ethiopia can implement benefit sharing (especially monetary benefit sharing) from the use of resources (Mulesa and Westengen 2020). A lack of

TABLE 2 Major domestic policies regarding benefit sharing in Ethiopia from 1994-2019

Policies	Government views on a benefit sharing mechanism	
Access to Genetic Resources and Community Knowledge, and Community Rights Proclamation No. 482/2006 (FDRE 2006a) and Council of Ministers Regulation (FDRE 2009)	Access to genetic resources is subject to a clear benefit-sharing agreement to protect community rights in terms of access to a benefit-sharing mechanism connected to genetic resources.	
Second Growth and Transformation Plan/GTP II (FDRE 2016)	Establish democratic and developmental good governance through mobilization of public participation; promoting empowerment of women and youth, and ensuring their participation in the development process, enabling them to benefit equitably from the outcomes of development; and equitable benefit sharing for the community.	
National Biodiversity Strategy and Action Plan (2005)	Costs and benefits of biodiversity conservation are shared amongst public, private, community and civil society organizations.	
National Biodiversity Action Plan (EBI 2015)	Equitable benefit sharing for commercial gains, and support women in accessing benefit- sharing mechanisms.	
Draft National Seed Policy (MoA 2019)	Benefit sharing from these resources are for land stewards.	
Convention on Biological Diversity (CBD) in 1994 (FDRE 1994), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) in 2003 and the Nagoya Protocol on Access and Benefit Sharing in 2012	 Local communities have the right to regulate access to community knowledge), to use their genetic resources and to share in the benefits arising from the utilization of these genetic resources and community knowledge (including a right to 50% of the monetary benefits received by the State, to be used for the common advantage of the communities in question). The type and amount of benefit sharing, as well as the sharing of non-monetary benefits between the State and local communities are decided in each of the access agreements. Revenue from access permits is deposited in an 'access fund'" and the money from each agreement is deposited in a separate account in the access fund". Development projects are a direct form of benefit sharing, whereas biodiversity projects are an indirect form of benefit sharing. For development projects, communities will be consulted on benefit sharing, and benefits are distributed based on their relative contribution to the conservation of genetic resources. 	
Environmental Policy of Ethiopia (1997)	Park, forest and wildlife conservation and management programs that conserve biological diversity on behalf of the country allow for a major share of any derived economic benefits to be channelled to local communities affected by such programs.	
The 2018 National Forest Law – a revised version of the 2007 forest law	Recognizes the rights of communities and acknowledges their role in managing natural forests and establishing plantations, without unduly compromising ecological services or biodiversity. It also recognizes participatory forest management as a vehicle to enhance the role of communities in sharing responsibilities and benefits of managing natural forests in accordance with agreed-upon management plans, and create incentives for private forest developers through mechanisms such as lease-free land, better access to land use and forest ownership certificates, and tax holidays until and including the first harvest (for private investors and associations) and the second harvest (for communities).	

Sources: Evans (2018), Mulesa and Westengen (2020), Pettorelli et al. (2016), Regine and Tone (2012)

TABLE 3 Forest and REDD+ laws and policies on benefit sharing

Document	Government views on a benefit-sharing mechanism, as outlined in relevant policies
Forest Development, Conservation and Utilization Proclamation No. 1065/2018 (FDRE 2018a)	 Benefit sharing is defined as "the allocation of benefits between the government and communities, and between communities from forests which have been developed collectively" (FDRE 2018a, Art.1.31). A private and association forest developer shall have the right to benefit from carbon sales and ecosystem services generated from the forest they develop, or which is under their possession (FDRE 2018a, Art 5.1.c; Art. 9.1.a). Community forest developers can share benefits generated from forest development as per community by-laws, and share benefits generated from the natural forests surrounding them without affecting their sustainable existence (FDRE 2018a, Art 7.1.c & g). The MEFCC is responsible for developing a system in order to determine benefit-sharing rights over forest products (Art 16.7); Regional governments "Shall establish or provide the institutional arrangements, budget allocation and manpower required for the implementation of this Proclamation" (Art. 17.6). The government can demarcate areas for forest carbon trade, with the participation of the local community (FDRE 2018a, Art. 19.3 & 3).
Development, Management, and Utilization of Community Watersheds Proclamation No. 1223/2020 (FDRE 2020)	• The proclamation is enacted to enable communities living in a given watershed to form "community watershed users' cooperative societies" to manage, protect and utilize community watersheds democratically (FDRE 2020, p. 12734).
National REDD+ Strategy 2018–2030 (FDRE 2018b)	 REDD+ serves to improve forest governance, including operationalizing transparent, fair and equitable REDD+ financial management mechanism and benefit-sharing schemes (FDRE 2018b, p. 21); Provides general principles for an Ethiopian REDD+ benefit-sharing mechanism, such as: payments based on results; transparent, decentralised and inclusive decision making; equity (fair distribution of costs and benefits including procedural aspects of participatory decision making); effectiveness (benefits should act as an incentive); and efficiency (benefit sharing in terms of costs); and supported by clear legal frameworks that govern rights and responsibilities, and safeguards (FDRE 2018b, pp. 58–59).
National REDD+ Consultation and Participation Plan (MEFCC 2016)	 The benefit-sharing mechanism is a priority area under consultation with principles of equitable access and sharing of benefits by all stakeholders and sectors, at all levels in Ethiopia (MEFCC 2016, p. 68). Although defining REDD+ beneficiaries is critical to the mechanism, the government only provides general descriptions and refers to beneficiaries as those benefiting or having the potential to benefit from the REDD+ process (MEFCC 2016, p. vii).
Forest Carbon Partnership Facility's Readiness Preparation Plan (FCPF's R-PP) (FDRE 2011b)	Formalized benefit sharing between the government and communities and where communities can negotiate forest resource ownership, management and benefit sharing. Benefits of the REDD+ program are shared equally among all relevant rights holders and stakeholders. REDD+ payments are planned to go to legal entities or recognized local community organizations. Payments to actors will be based on the following formula: benefit sharing indicators (USD/kg/ha) = Investment or reward/Carbon emissions X Area. However, clarity is still lacking on how carbon revenues will be shared between different cooperatives and, once revenues reach communities, how they will be distributed (FDRE 2011b).
Proposed REDD+ Investment Plan (2017–2020) (MEFCC 2017a)	This proposed investment plan acknowledges that forests generate environmental and economic benefits; notes the "absence of clear benefit-sharing mechanisms" (MEFCC 2017a, p.13); and has goals of "Establishing and operationalizing a transparent REDD+ financial management mechanism and a fair benefit-sharing scheme" (MEFCC 2017a, p.14). Clarifying BSM is reiterated in other parts of the document (MEFCC 2017a, p. 36; 40).

Sources: FDRE (2005, 2011b, 2018a, 2018b, 2020), Fetteri et al. (2016), MEFCC (2016, 2017a, 2017b)

inclusive stakeholder involvement and of consensus among stakeholder groups, together with limited capacity, and a lack of effective enforcement and follow-up mechanisms for these policies, has prevented effective implementation of benefit-sharing mechanisms on the ground. As a result, local communities are not benefiting from them (Birhanu 2010, EBI 2015, Mulesa and Westengen 2020). Moreover, power in financial distribution of funding from international sources is centralized in the hands of the federal government, yet forests fall mostly to regional government administrations, which lack an effective mechanism for community participation. The generality and vagueness of the regulatory regime and the lack of regulations and guidelines to ensure their effective implementation, along with limited experience in drafting benefit-sharing agreements, also pose major challenges for the implementation of existing benefit-sharing mechanisms (Birhanu 2010).

Legal and policy frameworks specific to forests and REDD+ benefit sharing

Our review finds that benefit sharing is an important part of the legal forestry framework in Ethiopia, with the aim of enhancing and protecting communities' rights and equity in ownership. Between the time Ethiopia expressed interest in implementing REDD+ in 2011 and 2020, the country has made important progress in providing the legal and policy framework needed to establish a REDD+ benefit-sharing mechanism (BSM), as summarized in Table 3. As of 2020, a national or jurisdictional REDD+ benefit-sharing mechanism is in development and yet to be finalized. The development of a REDD+ BSM is influenced by – and must be harmonized with – other forest policies and regulations, as well as other international REDD+ financing mechanisms, such as the FCPF and the BioCarbon ISFL fund. The Oromia Forested Landscape Program (OFLP) is Ethiopia's flagship REDD+ jurisdictional program that serves as an important learning opportunity to develop and test various tools and approaches related to REDD+, including a BSM (Atmadja et al. 2018, OFLP, n.d.).

In 2017, most (71%) stakeholders interviewed also (strongly) agreed that there are contradictions between laws and regulations in forestry, agriculture and other sectors that have impeded the implementation of REDD+, including its BSM. Forest Development, Conservation and Utilization Proclamation No. 1065/2018 is the main legal framework for REDD+ benefit sharing that provides important definitions required to implement a BSM, namely definitions of forest, forest land, and forest carbon. The Ministry of Environment, Forest and Climate Change (MEFCC) – and later the Environment, Forest and Climate Change Commission (EFCCC) was mandated to develop a benefit-sharing system in collaboration with regional governments. The proclamation allocates a specific type of forest ownership for communities, which was not present in the previous forest proclamation, thereby strengthening the role of community members in a REDD+ BSM (FDRE 2018a). In October 2021, the government was restructured and EFCCC was dissolved. The institutional arrangement for overseeing benefit sharing from REDD+ has yet to be determined.

While some aspects of benefit sharing have been clarified by the 2018 Forest Proclamation, such as its definition as "the allocation of benefits between the government and communities, and between communities from forests which have been developed collectively", and emphasis being placed on the need to develop a benefit-sharing mechanism based on participatory decision making, the proclamation still overlooks the need for coordination and harmonization between different sectors and levels of government, as expressed by experts interviewed in 2017. The forest proclamation has not been harmonized with Rural Land Administration and Land Use Proclamation No. 456/2005. The process of demarcating forest lands in areas that are also defined as rural lands needs further regulation and clarification. Both proclamations define and classify land ownership differently, which needs to be harmonized. The roles and responsibilities of regional governments are clearly spelled out in the 2018 forest proclamation and in the 2005 rural land administration proclamation, but are not clearly described in documents that guide Ethiopia's REDD+ benefit sharing.

Despite not being fully aligned with each other, all existing policies mention the sharing of benefits. Based on existing forest and REDD+ policies, Table 3 highlights three possible REDD+ beneficiaries: the private sector; those who have legal rights over forests; and vulnerable groups, including local communities and women. Existing policies also strongly refer to private companies that develop forests, pointing to the importance of a legal right to obtain benefits (Discourse 1), as well as payment for results (Discourse 2).

Overall, the six discourse identified in earlier studies also play out in Ethiopia, with the pro-poor and performance-based discourses dominating Ethiopian REDD+ stakeholders' beliefs, including the discourse that sees benefits being directed to forest stewards. This is in contrast with the FCPF, which leans towards benefits being directed mostly towards those with legal rights.

In the existing policy framework, there is a clear emphasis on results-based payments and rights. Yet, while principles for benefit sharing abound, these two aspects have not been clearly defined and implemented on the ground (MEFCC 2017b). Although somewhat limited, there is experience in the country around benefit sharing (Ibid 2017b). More clarity on the REDD+ benefit-sharing mechanism is also seen by the Government of Ethiopia as a national priority (Ibid 2017b). Meanwhile, REDD+ remains a preferred option with more than 84% of organizations interviewed perceiving REDD+ to be an effective option for reducing greenhouse gas emissions globally. Approximately 44% of organizations interviewed also believed that REDD+ is a financially affordable way to mitigate climate change.

As shown in Table 3, the National REDD+ Strategy provides general principles for Ethiopia's REDD+ benefit-sharing mechanism. There is mention of results-based payments; transparent, decentralized and inclusive decision making; the need for equity (fair distribution of costs and benefits including procedural aspects of participatory decision making), effectiveness (benefits should act as an incentive) and efficiency (benefit sharing in terms of costs); and the need to be

supported by clear legal frameworks that govern rights and responsibilities. Yet, many aspects are still unknown, including the benefit-sharing arrangements between the State and communities regarding benefits from State-owned but community managed forests, as well as eligibility criteria to participate in REDD+ actions and receive REDD+ benefits.

The National REDD+ Strategy promotes forest management, particularly of natural forest, and focuses on conservation rather than maximizing benefits for local communities. This indicates that any future benefit-sharing mechanism needs to provide sufficient incentives for stakeholders to be willing to contribute to sustainable natural forest management and conservation. The strategy places little emphasis, however, on incentivizing private investment in forestry development, which is crucial to reduce the timber and fuel wood supply gap in a sustainable manner, thereby reducing pressure on natural forests.

ACTORS' PERCEPTIONS ON REDD+ BENEFIT SHARING

Who should be paid?

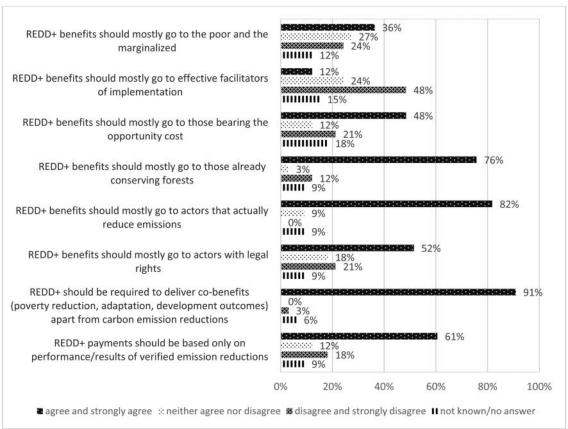
Figure 1 outlines actors' perceptions of who and what should be paid. Of all organizations interviewed, 82% agreed, or strongly agreed, that REDD+ benefits should go to actors that actually reduce emissions (Discourse 2), while 76% agreed

or strongly agreed that REDD+ benefits should mostly go to forest stewards (Discourse 3). There was limited support among REDD+ actors in Ethiopia for the allocation of benefits to effective facilitators of REDD+ implementation, highlighting a clear preference for performance-based incentives.

The National REDD+ Strategy emphasizes that the REDD+ benefit-sharing mechanism will be based on results-based payments, and aims to deliver co-benefits. Figure 1 shows strong consensus and support for this vision from most interviewed organizations. Of all organisations interviewed, 91% believed that REDD+ should be required to deliver co-benefits, and 61% felt that REDD+ payments should be based on performance alone.

Although the National REDD+ Strategy emphasizes a pro-poor vision for the REDD+ benefit-sharing mechanism, around a third (36%) of organizations interviewed agreed or strongly agreed that REDD+ benefits should go mostly to the poor and marginalized, making this the second lowest priority for interviewees. Nevertheless, organizations interviewed did express the need to include the poor and the marginalized. Interviewee 22, for example, said, "Focusing on halting deforestation and forest degradation, but disregarding its implications for the poor, has long been realized to be problematic. As such, REDD+ has to work in close collaboration with communities and all potential stakeholders. The global REDD+ community has also issued a guideline on social safeguards to reduce its negative impacts on communities and

FIGURE 1 Actors' perceptions on REDD+ benefit sharing(by percentage of responses)



the environment. If implemented in accordance with the set of rules designed, REDD+ should not cause harm to the poor, and should even generate benefits for the poor. Schemes like participatory forest management, which are run by members, are there to serve members on an equal basis; mechanisms to share the benefits of carbon gained among stakeholders should be worked out as soon as possible, though." While Interviewee 11 stated, "One of the strategies for mitigating deforestation and degradation rests on participatory forest management; it is hoped and also somehow proven that the participatory forest management approach is organized to serve the community on an equal basis; women are involved in the management of the forest; disadvantaged (forestdependent) communities are also organized and are participants in the management. Although, a number of issues (like generating sufficient income from the forest) need to be addressed, participatory forest management is a good strategy."

Challenges for REDD+ benefit sharing

As shown in Table 3, the National REDD+ Strategy provides general principles for a REDD+ benefit-sharing mechanism in Ethiopia. It states that REDD+ is a results-based payment scheme to be developed based on transparent, decentralized and inclusive decision making, while benefits from forest management activities should be distributed according to fair and equitable schemes. Although most organisations support the government's vision for a benefit-sharing mechanism, the majority of them also highlighted major challenges in implementing REDD+ in Ethiopia in general, including the REDD+ benefit-sharing mechanism.

Addressing drivers of deforestation and forest degradation Around 68% of organizations interviewed said a key challenge for REDD+ in Ethiopia and its benefit-sharing mechanism is addressing the main drivers of deforestation effectively without compromising development objectives. These organizations pointed out that underlyingdrivers of deforestation and forest degradation in Ethiopia relate to increasing demand for land and energy; the lack of stable and equitable forest tenure; weak law enforcement; and a lack of indigenous and local community involvement in decision-making processes.

Lack of knowledge and capacity

With regard to benefit sharing, specific challenges include a lack of awareness and knowledge of REDD+; a lack of technical expertise in monitoring carbon emissions and sequestration; and a lack of clear tenure and user rights. A majority (74%) of interviewees asserted that stakeholders lack knowledge and awareness when it comes to REDD+. As pointed out by the majority of organizations interviewed, the National REDD+ Strategy stipulates that Ethiopia's benefit-sharing mechanism must be based on results-based payments. However, 74% of organizations interviewed referred to a lack of technical expertise for monitoring carbon emissions and sequestration in Ethiopia, which poses a challenge for the verification of results; the very basis for benefit sharing. Weak

capacity to enforce laws and regulations was also cited as a key challenge for REDD+ implementation by 81% of the organizations interviewed.

Weak coordination amongst actors

Most (87%) of organizations interviewed cited weak coordination between government agencies, the private sector and civil society as being a problem, and 71% of these organizations expressed their concerns over contradictory legislation in forestry, agriculture and other sectors, and high transaction costs in implementing REDD+ in general, and its benefitsharing mechanism in particular. The National REDD+ Strategy also emphasizes the need to decentralize and adapt the benefit-sharing mechanism to local contexts through subnational governments. However, contradictions between laws and regulations at different jurisdictional levels (e.g., between national and subnational levels) were flagged by over half (54.8%) of the organizations interviewed, highlighting the potential challenges Ethiopia faces in adapting national policies for subnational implementation. Organizations interviewed also questioned how benefit sharing would be negotiated between sectors. REDD+ operates across a complex range of policies, with stakeholders competing over powers and interests. Interviewees said that what benefits one sector or group of stakeholders may come at the cost of another, and negotiations over benefits, and the benefit-sharing mechanism itself, delay REDD+ implementation on the ground.

Ineffective clarification of tenure and holistic land-use planning

The National REDD+ Strategy 2018–2030 emphasizes the need to determine – in clear legal terms – the individual, community and State entitlements (rights and duties) over each piece of land in the country, with legal consequences, as well as the need to promote forest land tenure security through forest land classification, zoning, demarcation and registration. As previously mentioned, 54.8% of organizations interviewed agreed or strongly agreed that REDD+ benefits should go mostly to actors with legal rights. Yet, 68% also flagged ineffective tenure clarification, and 64.5% felt that achieving broad consensus on changes to existing land-use plans was one of the major challenges for REDD+ in Ethiopia. The National REDD+ Strategy 2018–2030 also points out that unclear tenure/forest user rights (including carbon rights) continues to impede benefit-sharing mechanisms in Ethiopia.

DISCUSSION

Moving from a one-size-fits-all formula on benefit sharing to a contextual benefit-sharing mechanism

The issue of who should be paid is a simple question, but difficult to answer. While stakeholders believe payment should be based on performance, government policies are less clear. All six of the key discourse are represented in the various government policies relevant to REDD+. Yet, many policies emphasize rights and protection of these rights, with local

communities as the main beneficiaries. However, the definition of what and who these local communities are, is far from clear. Are they the poor? Ethnic minorities? Do they have legal rights? These are questions that remain unanswered, not only in Ethiopia, but in many countries involved in REDD+ across the globe. Although REDD+ will remain mostly a jurisdictional-based effort governed at the national level, more effective projects will require consultation with local communities and indigenous peoples.

Including REDD+ in national socio-economic development strategies as a key policy measure for achieving Sustainable Development Goals, Cancun Safeguards and UNDRIP would help REDD+ to receive adequate attention and funding commitments from non-forestry sector financing sources. Our study focuses on national-level stakeholders and offers a useful contrast to other studies (e.g., Abebe *et al.* 2020) on what local actors on the ground perceive as equitable benefit sharing. At the local level, power, age, gender, and access to land determine the perceived benefits from forest conservation. At the federal level, stakeholders mostly perceive that benefits should fall to those who actually reduce emissions or are land stewards, which is likely to be translated at the local level to mean those with power and access to land.

A unified REDD+ safeguard reporting framework (collection, reporting and verification) is needed that meets the requirements of the UNFCCC, UNDRIP and free, prior and informed Consent (FPIC) as well as requirements from funders of REDD+ activities. Future guidance on REDD+ safeguard reporting needs to be sufficiently flexible and should aim to build on and improve existing in-country capacity. While international guidance is needed, REDD+ safeguards system must be country-driven and sensitive to national circumstances (Boyle and Murphy 2012). Benefit sharing should also be designed based on communities' choices and capabilities in their social and cultural context (De Brabendere 2018, Morgera 2019).

Broader governance reform is a precondition for a REDD+ benefit-sharing mechanism

Benefit-sharing mechanisms need to be embedded in the overall governance system. However, forest governance in Ethiopia is challenged by weak institutions including unclear and unstable land tenure (Bekele et al. 2015), which provides easy conditions for forest conversion to agriculture (FDRE 2011a). The two main drivers of deforestation and forest degradation, including forest clearance for smallholder agriculture and illegal wood extraction (firewood charcoal and lumber), are related to local communities and their claims to derive benefits from land and forests (Bekele et al. 2015). In Ethiopia, with the exception of privately developed forest, all forest land has been owned by the State since the mid-1970s; just 2% of forest land is recognized as private property (Barrow et al. 2016, Kassa et al. 2017). Land rights can only be secured through individual land certificates (Schoneveld 2011). In areas where traditional rights dominate, they are also legally recognized (Ayana 2014). But in areas where land certificates have been provided either for individuals or for groups, land use rights are formally given through land use certificates. Article 4 of the new Forest Development, Conservation and Utilization Proclamation (No. 1065/2018) recognizes four types of forest ownership: private, community, association, and State (FDRE 2018a), but implementation of the forest law has been slow and weak (Ayana 2020). This legal tenure system differs to how actors with legal rights are defined in FCPF's R-PP, i.e., forest user cooperatives, forest user associations, communities that enhance and use forests, national parks and forest plantations (FDRE 2011b).

Forest Development, Conservation and Utilization Proclamation No. 1065/2018 states that "a private forest developer shall have the right to benefit from carbon sales and ecosystem services generated from the forest he develops, or which is under his possession". Although, the term 'private forest developer' could include traditional forest users, it is likely to refer to those who are able to invest in forest development. Yet, with unclear tenure and historical changes to property rights, many local communities have difficulties accessing REDD+ benefits (Bekele *et al.* 2015, Larson *et al.* 2013). Consequently, when not confirmed to be legal entities, local forest users and communities can be marginalized to the advantage of larger enterprises, especially those that are able to invest in forest restoration.

In an effort to provide local communities with access to forest resources, participatory forest management was introduced in the mid-1990s and has been adopted in the CRGE as a mechanism to reverse deforestation and improve the management of State-owned natural forest and woodland resources. Although participatory forest management allows legal access, it provides limited rights and benefits to participating communities (Kassa et al. 2017). Those involved in participatory forest management have been unable to protect forests from encroachment by non-participating forest users coming from surrounding communities (Ayana 2020). Clarity of tenure is one of the most important elements in safeguards policies (Costenbader 2011, Streck 2009, Karsenty et al. 2014, Sunderlin 2018, Streck 2020) and will be a key enabling condition for REDD+ benefit-sharing mechanism development and sustainable implementation in Ethiopia.

Costs and benefits

As is the case in many developing countries, the Government of Ethiopia struggles to reconcile economic development with environmental sustainability. The drive to increase agricultural production has resulted in a rapid conversion of forests and marginal lands into cultivated areas (Kassa *et al.* 2017), as well as efforts to attract large investments, that in many countries have led to large-scale land alienation. The shift towards a more coherent centralized land identification and allocation system has improved transparency in Ethiopia, apparently making it less prone to rent seeking than other countries (Schoneveld 2011). Yet, it is also small-scale activities by local people that are blamed for most deforestation.

Benefit-sharing mechanisms assume that there are benefits to share, that deforestation and forest degradation can be reduced and measured, and that benefits can be paid accordingly. However, Ethiopia's economy has mainly relied on agriculture. Its forests are predominantly found in dry forest landscapes with low average forest carbon density (Atmadja *et al.* 2019), and a large number of the forest-related mitigation measures rely on activities that are difficult to monitor, such as reforestation and shifting to fuel-efficient cookstoves (FDRE 2011a). This is confirmed by our findings showing that from Ethiopian stakeholders' perspectives, there have not been meaningful benefits on the table to build experiences in benefit-sharing mechanisms.

As benefit sharing should be based on the principle of FPIC, and include negotiation around the distribution of benefits, understanding of the issues involved is crucial, particularly an understanding of what benefit sharing entails, i.e., the distribution of direct and indirect net gains from the implementation of REDD+ (Luttrell et al. 2013, Pham et al. 2013, Wong et al. 2016), as well as the costs involved. Net gains are the benefits to be shared and thus most often discussed. However, most stakeholders overlook the costs associated with these benefits. If the costs are higher than the benefits, it is unlikely that environmental service providers would be willing to participate in REDD+. There is thus a need to increase awareness and understanding not only of the benefits, both monetary and non-monetary, and how they are distributed, but also of the implementation costs, transaction costs and opportunity costs (Pham et al. 2013) involved in achieving the results for which benefits, or payments are provided.

A benefit-sharing mechanism needs to define what the benefits are, how beneficiaries are determined, how benefits are distributed, and how safeguarding principles can support benefit-sharing arrangements (Chapman 2014). Claims to benefits are often determined by the type of benefits. Although there are many indirect benefits of REDD+, the focus is therefore mostly on its direct monetary benefits. Actors interviewed clearly understand REDD+ actions to generate results-based payments, and one could argue that paying actors for their efforts to protect or enhance carbon stock is also benefiting the wider community, albeit indirectly. While Ethiopia's legal framework supports the private sector to gain direct monetary benefits from their efforts, it does not specify similar conditions for local communities. Most policies implicitly state that for local communities, non-monetary benefits would suffice. And although local communities often appear to value non-monetary benefits (see Yuliani et al. 2015, 2020 for Indonesia and Pham et al. 2014 for Vietnam), communities may not prefer it when they need cash to access basic necessities.

CONCLUSIONS

Our paper documents a mismatch between current policies and preferences of REDD+ actors at the federal level: policies emphasize pro-poor benefit sharing and the provision of legal rights, while REDD+ actors favour distribution of benefits that correspond to REDD+ outcomes. Our paper contributes to the ongoing effort of developing a benefit-sharing mechanism for REDD+ in Ethiopia, and our current understanding of the relationship between discourses about fairness and the implementation of complex environmental policy programs. Building functional REDD+ benefit sharing requires cross-sectoral coordination and other supportive policies, such as the full and effective implementation of international policies like UNDRIP, SDGs, CBD and ABS, all of which stipulate that benefits should be shared equitably between stakeholders. Coordination and policies need to be developed based on inclusive decision-making processes.

Ethiopia's ongoing effort to develop benefit-sharing mechanisms builds on existing policies that mention benefit sharing. Federal-level REDD+ actors we interviewed generally viewed REDD+ as a results-based payment scheme. The multiple discourses at play imply different underlying philosophies on what is considered equitable; these need to be acknowledged by actors and negotiated upon. Rather than determining what discourses would work best, government agencies, donors and REDD+ project proponents should consider what work best for whom, and in what condition, based on legitimate and participatory decision making. There is potential for inconsistencies to arise within and across levels, which could be minimized through opened dialogues, learning mechanisms and inclusive processes, leading to policies and procedures that evolve and adjust over time. While policy debates on the design of Ethiopia's REDD+ benefit-sharing mechanism focus on who to pay and how much, more attention is required to address the enabling conditions for effective, efficient and equitable benefit sharing, in particular land tenure, safeguards and transparent and accountable decision making. Donors, government agencies and REDD+ implementers should consider a benefit-sharing mechanism combining both in-kind and in-cash payments to ensure all stakeholders have wider access to different types of benefits, and to avoid the REDD+ benefit-sharing mechanism reinforcing existing inequities between stakeholders.

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REFERENCES

- ABEBE, B.A., JONES, K.W., SOLOMON, J., GALVIN, K., and EVANGELISTA, P. 2020. Examining social equity in community-based conservation programs: a case study of controlled hunting programs in Bale Mountains, Ethiopia. *World Development* **135**: 105066.
- AGRAWAL, A., and GUPTA, K. 2005. Decentralization and participation: the governance of common pool resources in Nepal's Terai. *World Development* **33**(7): 1101–1114.
- ALTMAN, J. 2009. Benefit sharing is no solution to development. Indigenous peoples, consent and benefit-sharing. Lessons from the San-Hoodia case. Springer, Berlin, Germany. pp. 89–126
- ANGELSEN, A., MARTIUS, C., DE SY, V., DUCHELLE, A.E., LARSON, A.M., and PHAM, T.T. 2018. *Transforming REDD+: lessons and new directions*. CIFOR, Bogor, Indonesia.
- ATMADJA, S., and PETERU, S. 2018. Oromia, Ethiopia. In: C. STICKLER *et al.* (eds.) *The State of Jurisdictional Sustainability*. San Francisco, CA: EII; Bogor, Indonesia: CIFOR; Boulder, CO: GCF-TF.
- ATMADJA S., ESHETE, A., and BOISSIÈRE, M. 2019. Guidelines on Sustainable Forest Management in Drylands of Ethiopia. FAO, Rome, Indonesia.
- AYANA, A.N. 2020. Impacts of policy and legal framework on sustainable forest governance in Ethiopia. *Journal of Economics and Sustainable Development* 11(5).
- AYANA, A.N. 2014. Forest governance dynamics in Ethiopia: histories, arrangements, and practices. PhD thesis. Wageningen: Wageningen University.
- BARROW, E., KAMUGISHA-RUHOMEBE, J., NHAN-TUMBO, I., OYONO, R., and SAVADOGO, M. 2016. Who owns Africa's forests? Exploring the impacts of forest tenure reform on forest ecosystems and livelihoods. *Forests, Trees and Livelihoods* **25**(2): 132–156.
- BEKELE, M., TESFAYE, Y., MOHAMMED, Z., ZEWDIE, S., TEBIKEW, Y., BROCKHAUS, M., and KASSA, H. 2015. *The context of REDD+ in Ethiopia: drivers, agents and institutions*. Occasional Paper 127. CIFOR, Bogor, Indonesia.
- BIOCF. n.d. Oromia Forested Landscape Program. The World Bank. https://www.biocarbonfund-isfl.org/programs/oromia-forested-landscape-program. Accessed 15 January 2021.
- BIRHANU, F. 2010. Challenges and prospects of implementing the access and benefit sharing regime of the Convention on Biological Diversity in Africa: the case of Ethiopia, International Environmental Agreements: Politics, Law and Economics. *International Environmental Agreements* **10**(3): 249–266.
- BOYLE, J., and MURPHY, D. 2012. Designing effective REDD+ safeguard information systems: building on existing systems and country experiences. International Institute for Sustainable Development. Manitoba, Canada.
- BROCKHAUS, M., and DI GREGORIO, M. 2012. A brief overview: component 1 on national REDD+ policies and

- *processes.* CIFOR Infobrief 13. Center for International Forestry Research, Bogor, Indonesia.
- BROCKHAUS, M., CARMENTA, E., and DI GREGORIO, M. 2014. REDD+ policy networks: exploring actors and power structures in an emerging policy domain. *Ecology and Society* **19**(4): 29.
- CHAPMAN, S., WILDER, M., and MILLAR, I. 2014. Defining the legal elements of benefit sharing in the context of REDD+. *Carbon and Climate Law Review* **8**(4): 270–281.
- COSTENBADER, J. 2011. REDD+ benefit sharing: a comparative assessment of three national policy approaches. IUCN.
- COSTENBADER, J., Keenlyside, P., and BROADHEAD, P. 2015. Equity in forests and REDD+: an analysis of equity challenges as viewed by forestry decision-makers and practitioners in Cambodia, Lao PDR and Viet Nam. RECOFTC, Bangkok, Thailand.
- DE BRABENDERE, E. 2018. Human rights and international investment law. In: KRAJEWSKI, M., and HOFF-MANN, R. (eds.) Grotius Centre Working Paper Series, No. 208/075-HRL, 1–22.
- DI GREGORIO, M., BROCKHAUS, M., CRONIN, T., MUHARROM, E., SANTOSO, L., MARDIAH, S., and BUDENBENDER, M. 2013. Equity and REDD+ in the media: a comparative analysis of policy discourses. *Ecology and Society* **18**(2): 39.
- EBI. 2015. *Ethiopia's National Biodiversity Strategy and Action Plan 2015–2020*. Ethiopian Biodiversity Institute, Addis Ababa, Ethiopia.
- ETHIOPIA REDD+. 2013. *National REDD+ strategy:* national context of REDD+. Ethiopia REDD+. https://ethiopiareddplus.gov.et/redd-readiness/redd-national-strategy/
- EVANS, M. 2018. Ethiopia's new forestry law: a win for landscapes and livelihoods? Legislation advances community rights in forest management. Available at: https://forestsnews.cifor.org/57465/ethiopias-new-forestry-law-a-win-for-landscapes-and-livelihoods?fnl=. Accessed 15 January 2021.
- FDRE (Federal Democratic Republic of Ethiopia). 2005. Rural Land Administration and Land Use Proclamation No. 456/2005. URL: https://land.igad.int/index.php/documents-1/countries/ethiopia/legislation-and-policies-1/legislation-1/265-rural-land-administration-and-land-use-proclamation-2005/file. Accessed 15 January 2021.
- FDRE (Federal Democratic Republic of Ethiopia). 2006. Access to Genetic Resources and Community Knowledge, and Community Rights Proclamation. Proclamation No. 482/2006. A proclamation to provide for access to genetic resources and community knowledge and community rights. Federal Democratic Republic of Ethiopia. Addis Ababa, Ethiopia.
- FDRE (Federal Democratic Republic of Ethiopia). 2009. Council of Ministers Regulation to Provide for Access to Genetic Resources and Community Knowledge, and Community Rights. Regulation No. 169/2009. Federal Democratic Republic of Ethiopia. Addis Ababa, Ethiopia.

- FDRE (Federal Democratic Republic of Ethiopia). 2011a. Ethiopia's climate resilient green economy: climate resilience strategy agricultural and forestry. 70 pp. http://gggi.org/site/assets/uploads/2017/11/2015-08-Sectoral-Climate-Resilience-Strategies-for-Ethiopia-1-Agriculture-and-Forestry-Climate-Resilience-Strategy.pdf
- FDRE (Federal Democratic Republic of Ethiopia). 2011b. Forest Carbon Partnership Facility (FCPF): Readiness Preparation Proposal (R-PP). https://ethiopiareddplus.gov.et/wp-content/uploads/2017/06/R-PP-Ethiopia-final-May-25-2011-1.pdf
- FDRE (Federal Democratic Republic of Ethiopia). 2016. Growth and Transformation Plan II (GTP II) (2015/16-2019/20). FAOLEX Database. http://www.fao.org/faolex/results/details/en/c/LEX-FAOC169444/. Accessed 15 January 2021.
- FDRE (Federal Democratic Republic of Ethiopia). 2017. Intended Nationally Determined Contribution (INDC) of the Federal Democratic Republic of Ethiopia. 13 pp. https://www4.unfccc.int/sites/ndcstaging/Published Documents/Ethiopia%20First/INDC-Ethiopia-100615.pdf. Accessed 15 January 2021.
- FDRE (Federal Democratic Republic of Ethiopia). 2018a. Forest Development, Conservation and Utilization. http://extwprlegs1.fao.org/docs/pdf/eth182203.pdf
- FDRE (Federal Democratic Republic of Ethiopia). 2018b. National REDD+ Strategy. Ministry of Environment, Forest and Climate Change. https://www.forestcarbonpartnership.org/system/files/documents/Ethiopia% 20REDD%20Strategy_June%2025%20%202018.pdf. Accessed 15 January 2021.
- FDRE (Federal Democratic Republic of Ethiopia). 2020. Development, Management and Utilization of Community Watersheds Proclamation. Proclamation No. 1223/2020. FAOLEX Database. http://extwprlegs1.fao.org/docs/pdf/eth204275.pdf
- FDRE (Federal Democratic Republic of Ethiopia). No year. Interactive Restoration Atlas of the Federal Democratic Republic of Ethiopia. http://wri.github.io/forest-atlas-landing/#l=en
- FETTERI, V., MESELE, T., JORN, L., JARNO, H., GERTUDE, P., BINYAM, H., BEREKET, R., and MELAKU, B. 2016. Study of causes of deforestation and forest degradation in Ethiopia and the identification and prioritization of strategic options to address those. National REDD+ Secretariat, Ministry of Environment, Forest and Climate Change, the Federal Democratic Republic of Ethiopia.
- HERNES, H.K., JENTOFT, S., and MIKALSEN, K.H. 2005. *Fisheries governance, social justice and participatory decision-making. Participation in fisheries governance.* Springer, Dordrecht, The Netherlands. pp.103–118.
- JALLETA, A. 2021. Access and benefit sharing effectiveness: international environmental law implementation at the domestic Ethiopian level. *Beijing Law Review* 12: 485– 508.
- JENKINS, H. 2004. The cultural logic of media convergence. *International Journal of Cultural Studies* **7**(1): 33–43.

- KASSA, H., POESEN, J., DONDEYNE, S., and AMAURY, F. 2017. Impact of deforestation on soil fertility, soil carbon and nitrogen stocks: the case of the Gacheb catchment in the White Nile Basin, Ethiopia. *Agriculture, Ecosystems and Environment* **247**: 273–282.
- KARSENTY, A., VOGEL, A., and CASTELL, F. 2014. "Carbon rights", REDD+ and payments for environmental services. *Environmental Science & Policy* **35**: 20–29.
- LARSON, A.M., BROCKHAUS, M., SUNDERLIN, W.D., DUCHELLE, A., BABON, A., DOKKEN, T., PHAM, T.T., RESOSUDARMO I.A.P., SELAYA, G., AWONO, A., and HUYNH, T.B. 2013. Land tenure and REDD+: the good, the bad and the ugly. *Global Environment Change* 23(3).
- LUTTRELL, C., LOFT, L., MARIA, F.G., KWEKA, D., BROCKHAUS, M., ANGELSEN, A., and SUNDERLIN, W.D. 2013. Who should benefit from the REDD+? Rationales and realities. *Ecology and Society* **18**(4): 52.
- MAHANTY, S., FOX, J., NURSE, M., STEPHEN, P., and MCLEES, L. 2006. *Hanging in the balance: equity in community-based natural resource management in Asia.* RECOFTC.
- MCDERMOTT, M., MAHANTY, S., and SCHRECKEN-BERG, K. 2013. Examining equity: a multidimensional framework for assessing equity in payments for ecosystem services. *Environmental Science and Policy* **33**: 416–427.
- MEFCC. 2015. Mid-term progress report from October 2012 to November 2015 of Ethiopia's R-PP implementation submitted to Forest Carbon Partnership Facility (FCPF) Readiness Fund. National REDD+ Secretariat, Ministry of Environment, Forest and Climate Change, Addis Ababa, Ethiopia. https://ethiopiareddplus.gov.et/wp-content/uploads/2017/06/Ethiopia-MTR_2012-2015Final-Version.pdf
- MEFCC. 2016. National REDD+ Consultation and Participation Plan. National REDD+ Secretariat, Ministry of Environment, Forest and Climate Change, Addis Ababa, Ethiopia. https://ethiopiareddplus.gov.et/redd-readiness/redd-safeguards/consultation-participation/national-redd-cp-plan-final/
- MEFCC. 2017a. Proposal for REDD+ Investment in Ethiopia: Federal Democratic Republic of Ethiopia. National REDD+ Secretariat, Ministry of Environment, Forest and Climate Change, Addis Ababa, Ethiopia. http://www.mofed.gov.et/documents/10182/32227/REDD%2B+ Investment++Plan_program+document.pdf/c39b22eb-abfc-48be-907c-b44ff4505e55
- MEFCC. 2017b. Strategic Environmental and Social Assessment (SESA): For the implementation of REDD+ in Ethiopia including the Oromia Forested Landscape Program (OFLP), Social Assessment (SA). Oromia REDD+ Coordination Unit and National REDD+ Secretariat, Ministry of Environment, Forest and Climate Change, Addis Ababa, Ethiopia.
- MERINO, A. and VALOR, C. 2011. The potential of corporate social responsibility to eradicate poverty: an on-going debate. *Development in Practice* **21**(2): 156–167.

- MoA (Ministry of Agriculture). 2019. Transforming the Ethiopian seed sector: issues and strategies. Ministry of Agriculture, Addis Ababa, Ethiopia.
- MORGERA, E. 2017. Fair and equitable benefit-sharing: history, normative content and status in international law. *Normative Content and Status in International Law (June 22, 2017). Benefit-sharing.* In: ORLANDO, E., and KRÄMER, L. (eds) Encyclopedia of Environmental Law: Principles of Environmental Law (EE, 2017).
- MORGERA, E. 2019. Under the radar: the role of fair and equitable benefit-sharing in protecting and realising human rights connected to natural resources. *The International Journal of Human Rights* **23**(7): 1098–1139.
- MULESA, T.H., and WESTENGEN, O.T. 2020. Against the grain? A historical institutional analysis of access governance of plant genetic resources for food and agriculture in Ethiopia. *The Journal of World Intellectual Property* **23**(1–2): 82–120.
- NELSON, F. 2010. Community rights, conservation and contested land. The politics of natural resource governance in Africa. Earthscan, New York, New York, USA.
- OFLP (Oromia Forested Landscape Program). n.d. *Oromia Forested Landscape Program*. https://www.oflp.et/images/ct_images/brief-oflp.pdf.
- PETTORELLI, N., WEGMANN, M., SKIDMORE, A., MÜCHER, S., DAWSON, T.P., FERNANDEZ, M., LUCAS, R., SCHAEPMAN, M.E., WANG, T., O'CONNOR, B., and JONGMAN, R.H. 2016. Framing the concept of satellite remote sensing essential biodiversity variables: challenges and future directions. *Remote Sensing in Ecology and Conservation* 2(3): 122–131.
- PHAM, T.T., BROCKHAUS, M., WONG, G., DUNG, L.N., TJAJADI, J.S., LOFT, L., LUTTRELL, C., and ASSEMBE, M.S. 2013. Approaches to benefit sharing: a preliminary comparative analysis of 13 REDD+ countries. Working Paper 108. CIFOR, Bogor, Indonesia.
- PHAM, T.T., MOELIONO, M., and LE, T.M. 2014. Local preferences and strategies for effective, efficient, and equitable distribution of PES revenues in Vietnam: lessons for REDD+. *Human Ecology* **42**: 885–889.
- PHAM, T.T., MOELIONO, M., ANGELSEN, A., BROCK-HAUS, M., GALLO, P., HOANG, T.L., DAO, T.L.C., OCHOA, C., and BLCANEGRA, K. 2018. Strategic alignment: integrating REDD+ in NDCs and national climate policies. 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. pp. 69–80.
- RAVIKUMAR, A., LARSON, A., DUCHELLE, A., MYERS, R., and TOVAR, J.G. 2015. Multilevel governance challenges in transitioning towards a national approach for REDD+: evidence from 23 subnational REDD+ initiatives. *International Journal of the Commons* **9**(2).
- REGINE, A., and TONE, W. 2012. The access and benefitsharing agreement on Teff Genetic Resources: facts and

- *lessons*. FNI Report. https://onlinelibrary.wiley.com/doi/full/10.1111/jwip.12142
- RIBOT, J.C., and PELUSO, N.L. 2003. A theory of access. *Rural Sociology* **68**(2): 153–181.
- RUDDLE, K., and HICKEY, F. 2008. Accounting for the mismanagement of tropical nearshore fisheries. *Environment, Development and Sustainability* **10**(5): 565–589.
- SCHONEVELD, G.C. 2011. The anatomy of large-scale farmland acquisitions in sub-Saharan Africa. Working paper 85. CIFOR, Bogor, Indonesia.
- SHERPA, D.T., and BROWER, A. 2016. Equity in sharing the potential benefits of REDD+. In. *Journal of Forest and Livelihood* **13**(1): 20.
- SIMONET, G., ATMADKA, S., AGRAWAL, A., BÉNÉDET F., CROMBERG, M., DE PERTHUIS C., HAGGARD, D., JANSEN N., KARSENTY, A., LIANG, W., MOREL, A., NEWTON, P., SALES A-M, SATWIKA, A., SCHAAP B., SEYLLER, C., SILVIANA, V., and VAILLANT, G. 2020. ID-RECCO, International database on REDD+ projects and programs: linking economics, carbon and communities. Ver. 4.1. http://www.reddprojectsdatabase. org/view/projects.php?id=231&name=Ethiopia&type= project
- SUNDERLIN, W.D., LARSON, A.M., and SARMIENTO BARLETTI, J.P. 2018. Land and carbon tenure: some but insufficient progress. In: ANGELSEN, A., MARTIUS C, DE SY V, DUCHELLE AE, LARSON, A.M., and PHAM, T.T. (eds.) *Transforming REDD+: lessons and new directions.* CIFOR, Bogor, Indonesia. pp. 93–102.
- STRECK, C. 2009. Rights and REDD+: legal and regulatory considerations. 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. 151–162.
- STRECK, C. 2020. Who Owns REDD+? Carbon Markets, Carbon Rights and Entitlements to REDD+ Finance. *Forests* **11**(9): 959.
- UNFCCC (United Nations Framework Convention on Climate Change). 2020. Summary of Ethiopia's Updated Nationally Determined Contribution (NDC). pp 1–9. https://www4.unfccc.int/sites/ndcstaging/Published Documents/Ethiopia% 20First/Ethiopia% 27s% 20 NDC% 20 update% 20 summary % 2020 20. pdf
- VERRA. 2019b. Bale Mountains Eco-Region REDD+ project: climate, community and biodiversity standard. https://registry.verra.org/app/projectDetail/CCB/1340. Accessed 18 October 2021.
- WONG, G.Y., LUTTRELL, C., LOFT, L., YANG, A., PHAM, T.T., TJAJADI, J., ARWIDA, S., ASSEMBE-MVONDO, S., and BROCKHAUS, M. 2016. Assessing REDD+benefit sharing for efficiency, effectiveness and equity. CIFOR, Bogor, Indonesia.
- WONG, G.Y., LUTTRELL, C., LOFT, L., YANG, A., PHAM, T.T., NAITO, D., ASSEMBLE-MVONDO, S., and BROCKHAUS, M. 2019. Narratives in REDD+ benefit

- sharing: examining evidence within and beyond the forest sector. *Climate Policy* **19**(8).
- WYNBERG, R., and HAUCK, M. 2014. People, power, and the coast: a conceptual framework for understanding and implementing benefit sharing. *Ecology and Society* **19**(1): 27.
- YULIANI, E.L., DE GROOT, W., KNIPPENBERG, L., and BAKARA, D.O. 2020. Forest or oil palm plantation? Interpretation of local responses to the oil palm promises
- in Kalimantan, Indonesia. *Land Use Policy* **96**(2020): 104616.
- YULIANI E.L., MULYANA, A., ADNAN, H., MANALU, P., ACHDIAWAN, R., TIAS, P., MOELIONO, M., and BALANG, T. 2015. Agroforestry and forestry in Sulawesi series: local perceptions of forest ecosystem services and collaborative formulation of reward mechanisms in South and Southeast Sulawesi. Working paper 210. World Agroforestry Centre (ICRAF), Bogor, Indonesia. 16 pp.