



U4 ISSUE 2023:5

Achiba A. Gargule

Natural resource commodity supply chains

Lessons from existing anti-corruption initiatives

Corruption erodes sustainable and inclusive development. It is both a political and technical challenge. The U4 Anti-Corruption Resource Centre (U4) works to understand and counter corruption worldwide.

U4 is part of the Chr. Michelsen Institute (CMI), an independent development research institute in Norway.

www.u4.no

u4@cmi.no

Read online

www.u4.no/r/IS2305

Collaborators

This U4 Issue is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the author(s) and do not necessarily reflect the views of USAID or the United States Government.



The extraction of and trading in natural resources relies on supply chains with significant corruption risks. Analysing and understanding the risks, and at what stage in the chain they occur, can help practitioners develop more effective tools and strategies to mitigate corruption. Lessons can be learned from existing anti-corruption initiatives when striving to improve transparency and accountability in natural resource supply chains.

Main points

- While there are several existing initiatives promoting the transparency and accountability of governments in the extraction and allocation of natural resources, as well as their use of revenues, there is interest from investors, civil society, and some governments in improving the current – and narrow – legal requirements.
- Although global commitments to reduce corruption in natural resource supply chains have increased, there is often a lack of understanding as to how corruption manifests itself. There needs to be recognition of the complex country challenges, the regulatory and institutional ecosystems in which supply chain initiatives are implemented, and how national and subnational initiatives tackle the different dimensions of corruption in supply chains.
- Consistent corruption risk analysis and better understanding of supply chains are essential in setting priorities, developing strategies, and identifying what is needed to effect change. Sufficient attention must be paid to analysing corruption risks at

different stages in natural resource supply chains, the political economy of the target area, and the capacities and weaknesses (including power relations) of anti-corruption actors.

- Anti-corruption initiatives in natural resource supply chains seem most effective when integrated into a broader package of institutional reforms. There is no ‘one size fits all’ solution, but a combination of initiatives with effective on-the-ground action, and source country commitment, has the potential to contribute to natural resource supply chain transparency.
- Incentivising producers in source countries to participate in supply chain initiatives and broadening the scope of interventions to cover several sectors and agencies could reduce corruption, increase accountability, and support the transition to more sustainable natural resource governance.

Contents

Natural resource extraction and trade: What are the challenges?	5
Understanding corruption in natural resource supply chains	7
Examining the development of anti-corruption initiatives and collaborative partnerships	9
Exploring the existing anti-corruption initiatives	12
1. Public sector reform initiatives	12
2. Social accountability initiatives	13
3. Multistakeholder initiatives	14
4. Voluntary certification standards	14
5. Corporate traceability systems	15
Evaluating the effectiveness of existing initiatives: What lessons can be learned?	16
Next steps for practitioners	18
Incorporate criteria that address corruption risks into supply chain approaches	18
Create a clear vision of what the supply chain initiative aims to achieve, and ensure governments, partners, and stakeholders agree with these goals	18
Prioritise supply chain corruption risk assessments during the development of initiatives	19
Establish and support anti-corruption initiatives in natural resource supply chains as a component of broader anti-corruption strategies	19
References	20

Natural resource extraction and trade: What are the challenges?

The extraction of, and trade in, natural resource commodities (including minerals but also fishery and forest products) is a driver of economic growth and a source of employment and income for millions of people around the world. Commodity supply chains cover a range of steps from source country production, to export, including 'licensing, exploration, contracting, extraction, and revenue generation and allocation of natural-resource revenues'.¹ Governments, private companies, and non-governmental organisations (NGOs) are all involved in these supply chains in varying ways.

Natural resource extraction often occurs in remote locations in countries experiencing severe corruption and other governance challenges. Commodity supply chains are thus linked to significant corruption risks. In the case of natural resource supply chains, corruption is an important contributor to poor development outcomes, where corrupt practices facilitate a range of illegal activities across sectors.² These concerns have contributed to the development of initiatives that promote transparency and accountability, and which mitigate corruption in natural resource commodity supply chains. Early initiatives to reduce corruption in natural resource sectors have tended to focus on making revenues more transparent, whereas corruption risks may arise at any point along supply chains, including resource access, extraction, processing, transportation, and revenue expenditure. Therefore, policymakers, law enforcement, and other stakeholders are encouraged to improve understanding of corruption risks along the supply chain, to better adapt responses to evolving corruption patterns.³ Understanding and addressing corruption along the entire natural resource supply chain is fundamental to creating a more sustainable model for natural resource use.⁴

This U4 Brief covers five categories of initiatives where dealing with corruption is the primary or secondary focus in natural resource supply chains: (1) public sector reform initiatives; (2) social accountability initiatives; (3) multistakeholder monitoring bodies; (4) voluntary certification standards; and (5) corporate

1. Acosta, 2013, 89.

2. Tacconi and Williams, 2020.

3. OECD, 2016.

4. Smith and Grant, 2021.

traceability initiatives. Its purpose is to explore anti-corruption lessons from established natural resource supply chain initiatives. Based on a desk review of existing literature on such measures, we describe the selected initiatives' approaches, highlight their application, and identify their anti-corruption potential where possible. Lastly, we make suggestions to inform practitioners as they continue to implement governance measures in natural resource supply chains.

Key Terms

Natural resources supply chains are the steps and processes through which natural resources are extracted, traded, processed, and exported. They include the system of organisations, people, technology, activities, information, and resources involved in moving a product or service from supplier to customer. Supply chain activities transform natural resources, raw materials, and components into a finished product that is delivered to the end customer. The chain is comprised all the activities that begin with the ecological and biological regulation of natural resources, followed by the human extraction of raw material, and includes several steps, eg transportation; processing; getting permits; regulation; the monitoring of operations, storage, sales; and then the final delivery to the consumer.

Corruption: In the context of natural resource supply chains, corruption involves the abuse of entrusted power for private gain, and corrupt practices take the form of bribery for information on the movements of animals or patrols; obtaining fishing, logging, or hunting permits; falsifying export permits or shipping documents; avoiding inspections or seizures; or dropping charges. Such practices in supply chains occur within governments through favours to policymakers for limiting environmental regulation and monitoring, embezzlement of funds intended to improve environmental management and conservation, or deals with banks to facilitate laundering of the proceeds of corrupt actions.

Natural resource supply chain transparency initiatives: Supply chain transparency refers to the disclosure of supply chain and sourcing information to the public and various stakeholders. Supply chain transparency initiatives allow companies to meet regulatory requirements, connect with and understand the actors in the upstream supply chain, and demonstrate sustainability efforts and openness to stakeholders. They also allow civil society and other non-state actors to play a role in countering illegality and corruption.

Understanding corruption in natural resource supply chains

Rapid expansion of the production and trade in natural resource commodities is associated with high levels of corruption.⁵ Corruption, which is understood as ‘the abuse of entrusted power for private gain’,⁶ is a major barrier to the potential for sustainable development outcomes from natural resource wealth – a phenomenon sometimes referred to as the ‘resource curse’.⁷ Recent analysis shows that corruption risks in natural resources are likely to expand as extraction increasingly occurs in remote places.⁸ Corrupt practices, such as bribery, embezzlement, misappropriation, the diversion of public funds, and facilitation payments, may arise at any point in natural resource value chains – from the decision and award of extraction rights, to the regulation and management of extraction, revenue collection, management, and expenditure.⁹

At the same time, policy is evolving to recognise the importance of context-specific anti-corruption approaches, particularly those tackling the supply and demand for corruption in source countries.¹⁰ Typical natural resource value chains – such as forestry, fisheries, and mining – take raw materials through primary and secondary processing facilities and distribution channels to markets and end customers. Value chain governance measures therefore involve inter-organisational decision processes and regulatory practices across multiple stakeholders, such as supply chain companies and state and non-state actors.¹¹

Corruption along natural resource supply chains comes in various forms and differs across types of natural resources, governance structures, and the actors involved. Typical forms of corruption include: 1) bribery for information on the movements of monitoring patrols, in the issuing of fishery licences and in the negotiation of fisheries access agreements, logging or hunting permits, 2) falsifying export permits or shipping documents; 3) avoiding inspections or seizures; or 4) dropping charges.¹² Other corrupt practices involve interactions between public actors in natural-

5. Williams and Dupuy, 2016.

6. Transparency International, n.d.

7. Auty, 1993.

8. Williams and Dupuy, 2016.

9. OECD, 2016.

10. OECD, 2016.

11. Gardner et al., 2019.

12. TNRC, 2019.

resource-focused institutions and line ministries, including the granting of favours to policymakers to ensure minimal environmental regulations or law enforcement,¹³ embezzlement of funds that are intended to improve environmental management and conservation, or collusion between officials with discretionary power in the negotiation of agreements and issuance of licences.¹⁴

Supply chains face particularly significant risks from corruption in emerging economies, where they often operate across distant, heterogeneous, turbulent, and ambiguous business environments, and where strong connections between petty and grand corruption make the associated criminal networks difficult to disrupt.¹⁵ This makes corruption risks difficult to identify, understand, and mitigate, especially when supply chain anti-corruption efforts are poorly coordinated.¹⁶

13. Sundström, 2015.

14. Hanich and Tsamenyi, 2009.

15. Silvestre et al., 2018.

16. UN Global Compact, 2016.

Examining the development of anti-corruption initiatives and collaborative partnerships

Much progress has been made to improve the governance of natural resources through various transparency and accountability initiatives. While early efforts focused on contract and revenue transparency,¹⁷ more recent anti-corruption efforts have addressed traceability and supply chain transparency.¹⁸ Many anti-corruption policies adopted in countries with abundant natural resources tend to involve whole-of-government approaches.¹⁹ There is also recognition of the role of civil society organisations (CSOs) in monitoring and/or overseeing anti-corruption measures along supply chains, particularly influential watchdog groups with the political leverage, financial means, and knowledge necessary to scrutinise, pose challenging questions, and demand results.²⁰

Many partnerships have also been developed via multistakeholder initiatives that aim to promote greater transparency and accountability in natural resource supply chains. Examples include those in forestry ([Forest Stewardship Council \(FSC\)](#), [Programme for the Endorsement of Forest Certification \(PEFC\)](#)), fisheries ([Fisheries Transparency Initiative \(FiTI\)](#), [Marine Stewardship Council \(MSC\)](#)), and biodiversity ([IUCN-ICMM Mining Dialogue](#)). The efforts of the [Extractive Industries Transparency Initiative \(EITI\)](#) require member countries and signatory companies to facilitate information sharing on natural resources. This includes information on financial transfers between governments and corporations to increase public awareness and encourage demand for good governance.²¹

These initiatives – in the form of information and technology, legal and policy tools, and incentives – aim to rebalance asymmetries in information about the origin and impacts of traded commodities, therefore helping to empower vulnerable communities in source countries. While corruption is not a primary focus of most of these initiatives, these interventions are typically grounded in an understanding that

17. Chêne, 2017.

18. Bateman and Bonanni, 2019.

19. Tacconi and Williams, 2020.

20. Alexandra, Patrick, and Daniel, 2018.

21. Rathinam et al., 2019.

transparency and accountability in natural resource commodity production are, in many cases, closely associated with improved governance.

Traceability, certification, and other supply chain management systems are among the most familiar governance initiatives. More broadly, however, many anti-corruption policies that are not specific to supply chains can still impact them, eg public financial management and whole-of-government approaches.²²

Supply chain initiatives have been established to encourage more information sharing as to what is happening upstream and to communicate this information within governments and firms.²³ Besides public disclosure of information, these initiatives seek to incentivise changes to improve management and accountability, reduce the risk of corruption, and improve regulation and crime prevention.²⁴ However, evidence of the effectiveness of many existing approaches is remarkably sparse and violations are not necessarily effectively sanctioned, potentially exacerbating corruption.²⁵

Governing natural resource supply chains is a political process that requires balancing transparent public disclosure of information and commercial considerations, such as preserving the competitive advantages of firms.²⁶ As a result, natural resource supply chain initiatives are shifting their focus from single actors to embedding obligatory or voluntary standards and commitments for responsible behaviour across multiple stakeholders.²⁷ Many anti-corruption initiatives combine strengthening oversight and control with transparency in contracting and revenue flows.²⁸ This is because, while transparency is needed, it is insufficient to mitigate corruption on its own²⁹ – especially given the complexity of corruption in supply chains.³⁰ Beyond transparency, other aspects that require action include supportive legal frameworks, regulations, and administrative processes for effective stakeholder engagement, as well as strengthening the capacity of communities or local governments to engage in supply chain governance.³¹

The profound changes occurring in natural resource sectors – remote extraction, lengthier and opaque supply chains, complex proliferation of actors³² – create numerous opportunities for increasingly sophisticated forms of corruption. Generic

22. Tacconi and Williams, 2020.

23. Bateman and Bonanni, 2019.

24. Freitas, 2021; Grant, Freitas, and Wilson, 2021; Smith and Grant, 2021.

25. Grant, Freitas, and Wilson, 2021.

26. Bateman and Bonanni, 2019.

27. Mena and Palazzo, 2012.

28. Williams and Dupuy, 2016.

29. Calland and Bentley, 2013.

30. Williams and Dupuy, 2016.

31. Dietsche et al., 2013.

32. Williams and Dupuy, 2016.

anti-corruption policy has not kept pace with these changes, or with the global integration of natural resource supply chains. A major finding of recent anti-corruption effectiveness literature is that a greater focus should be placed on embedding detailed corruption risk assessments in intervention design, so as to ‘connect the corruption dots’ between contexts.³³ This includes detailed and rigorous approaches to risk, starting with the decision to extract natural resources and continuing to the many decisions that follow – such as those setting the terms of contracts, and disclosing information regarding operational and financial matters and how revenues are invested.³⁴

Figure 1. Examples of corruption risk along natural resource supply chains

Steps in the natural resource supply chain		Corruption risks	
Access	Distortionary decision making	Legal and regulatory corruption (avoiding compliance with regulations, safeguards)	Falsification of documents
Hiring	Bribery for promotions, transfers, compensation	Falsification of documents, silence payments	
Management	Bribery in investment authorisation	Political influence over decision making/preferential treatment	Regulatory corruption (waivers to regulation and licensing)
Transport	Bribes to change documentation of volumes or origin	Bribes at checkpoints for speed of clearance	Avoiding inspection
Processing	Bribes for authorisation or processing permits	Falsification of documents, silence payments	
Export	Falsification of documents, silence payments (origin classification, value)	Bribes to customs officials, cargo inspection	Preferential treatment of traders

33. TNRC, 2019; Williams and Dupuy, 2016.

34. Kaufmann, 2015.

Exploring the existing anti-corruption initiatives

Investors, corporations, industry groups, not-for-profit organisations, consumers, and some governments have all called for greater transparency in natural resource supply chains.³⁵ Initiatives that have arisen in response vary in scope, ambition, and stage of implementation. While most of these do not explicitly target corruption, most aim at increasing sustainable natural resource use, potentially indirectly targeting corruption if legal reforms and enforcement are effective. Government institutions play an essential role in generating incentives, creating effective deterrents and sanctions for adopting sustainable supply chain initiatives, building and maintaining critical infrastructure (eg anti-corruption policies, anti-corruption courts, and law enforcement), and implementing measures and safeguards.³⁶

Anti-corruption strategies in natural resource supply chains in source countries take many forms and relate to various processes. The next section proposes a typology of initiatives where preventing corruption is the primary or secondary focus. Five broad categories of interventions are identified, with examples provided. These are: (1) **public sector reform initiatives** aimed at preventing or eradicating corrupt behaviours in public administration and service delivery to increase public sector effectiveness, transparency, and accountability through improved administrative, financial, and control systems; (2) **social accountability initiatives** that rely on public participation through citizen monitoring for corruption prevention and creating incentives for better performance; (3) **multistakeholder initiatives** where diverse stakeholders can work in partnership to improve the prevention of corruption, transparent management of public resources and delivery of services; (4) **voluntary certification standards** where initiatives aim to ensure that products comply with conditions and norms established by law and are promoted as effective alternatives to regulation and tools for promoting business accountability; and (5) **corporate traceability systems** which are publicly stated goals by a single firm or group of companies to eliminate corruption from their supply chains.

1. Public sector reform initiatives

Corruption can be viewed as a symptom of failed institutions, implying that effective anti-corruption measures must address the causes of institutional failure and

35. Donofrio, Rothrock, and Leonard, 2017.

36. Lambin et al., 2018; Stephenson and Schütte, 2019; Schütte, 2020.

misgovernance.³⁷ Public sector decisions govern natural resources all along supply chains, so reform initiatives often focus on promoting public sector integrity and high ethical standards in administrative decisions. Initiatives in this category often involve a combination of two or more interventions related to improvements in budget processes, oversight, and management of resources.³⁸ This category also includes reforms related to simplifying taxation and its collection so as to address concerns that complex taxation presents opportunities for corruption. Many public sector reform initiatives also incorporate strengthening law enforcement capacity, increasing the volume of law enforcement, and improving enforcement agencies' monitoring abilities. For example, efforts in the forest sector show that training for law enforcement officials on issues related to corruption – including creating a scorecard for forest law enforcement, and compiling information on arrests, prosecutions, convictions, and sentencing – can increase suppression of corruption and associated crimes.³⁹ Public sector reform initiatives need not explicitly target natural resource corruption but may aim to improve governance and tackle corruption in government institutions overall, indirectly benefitting natural resource supply chain governance.

2. Social accountability initiatives

Social accountability refers to actions, tools, and mechanisms used by civil society, the media, citizens, and communities to hold elected and appointed officials accountable. Three core elements of social accountability are: (a) a focus on citizen rights and access to information on policy and budget commitments; (b) efforts to strengthen citizens' voice in and access to governance through monitoring and feedback; and (c) the creation of safe spaces and processes for dialogue and problem-solving.⁴⁰ The success of social accountability initiatives is affected by the role of different kinds of political institutions, the type and capacity of civil society actors involved, and a wide range of 'relational' factors.⁴¹ This assumes that success depends on governments' downward accountability, especially where formal procedural accountability by government and other powerful actors is weak or non-existent. Social accountability initiatives in the anti-corruption field include: citizen monitoring and oversight of public and/or private sector performance, user-centred public information access/dissemination systems, public complaint, and grievance redress mechanisms, as well as citizen participation in actual resource allocation

37. Hunter and Shah, 2000.

38. Menocal et al., 2015.

39. Rosenbaum, 2005.

40. Hart, 2022, 3.

41. Hickey and King, 2016.

decision-making, such as participatory budgeting.⁴² There is growing focus on applying social accountability for transparency and accountability of natural resource revenues, with valuable lessons from the work of civil society on tax justice and tax havens.⁴³

3. Multistakeholder initiatives

The participation of business associations, NGOs, governments, and other stakeholders is an essential precondition for the broad recognition and application of codified standards or guidelines. Many multistakeholder initiatives assume that making information about revenue flows more transparent enables citizens, governments, and others to use the information to hold governments to account for revenues and their use.⁴⁴ The Extractive Industries Transparency Initiative (EITI), the Fisheries Transparency Initiative (FiTI), and the Forest Legality Initiative (FLI) represent the most prominent multistakeholder initiatives formed to address governance risks and promote better management and accounting systems for managing natural resources. Although there are significant variations across contexts and initiatives, the value of multistakeholder initiatives for tackling corruption depends on changing key actors' incentives and overcoming the design problems and conflicts of interests of key actors. The anti-corruption effects of these initiatives depends on their ability to raise the standards of natural resource governance, secure the protection of vulnerable groups or species, and promote access to information about resource revenues and their use.⁴⁵

4. Voluntary certification standards

Voluntary certification standards typically include the protection of biodiversity advanced through a range of mechanisms, from prohibitions on destroying certain ecosystems, to controls on negative externalities that can harm biodiversity.⁴⁶ Initiatives such as the Forest Stewardship Council (FSC), which certifies forests and promotes labelled forest products, have led to efforts by environmental groups and industry to export the certification and labelling approach to other resource sectors. An example is the Marine Stewardship Council (MSC) which is the first global multicriteria certification and labelling scheme for marine fisheries.⁴⁷ Such initiatives may promote transparency and accountability in countries where

42. Fox, 2015.

43. McGee and Gaventa, 2010.

44. McGee and Gaventa, 2010.

45. Søreide and Truex, 2011.

46. Milder et al., 2016.

47. Gulbrandsen, 2005.

corruption is sporadic due to their role in documenting natural resources practices and applying third-party monitoring.⁴⁸

5. Corporate traceability systems

Advances in artificial intelligence, big data analytics, and information technologies are driving new anti-corruption opportunities that have the potential to improve natural resource supply chain governance. These developments have led to private-sector-led and hybrid governance interventions that increase connectivity between producers and consumers through exchanging information in supply chains.⁴⁹ A core aspect of such initiatives is traceability. This is the capacity to verify the history, location, and status of an item through documented identification to reliably track all component materials of the product back through all supply chain steps and pathways to their origins, thereby preventing the introduction of any unauthorised material.⁵⁰ In practice, while some progress has been made, traceability systems' promise has yet to be fully realised. Traceability systems, as currently implemented, are prone to vulnerabilities that reduce their effectiveness in preventing commodity and money laundering and combating illegality and corruption.⁵¹ The effectiveness of traceability systems depends not only on technical and financial capabilities (influenced by political and institutional priorities) but also on implementation, which may be cursory and ineffective against corruption risks. In some instances, implementation has been described as administrative exercises that favour large producers, with concentrated supply chains squeezing out local producers and creating disproportionate burdens on smallholders, driving them deeper into illegality and preventing access to markets.⁵²

48. Søreide and Williams, 2013.

49. Gardner et al., 2019.

50. Grant, Freitas, and Wilson, 2021.

51. Grant, Freitas, and Wilson, 2021.

52. McDermott, Irland, and Pacheco, 2015.

Evaluating the effectiveness of existing initiatives: What lessons can be learned?

This section summarises the available evidence on the effectiveness and impact of different anti-corruption initiatives in natural resource supply chains, and the lessons that can be drawn for improving them when dealing with natural resource corruption in source countries.

The first lesson is that incentivising producers in source countries to participate in supply chain initiatives and broadening the scope of interventions – including involving more companies, regions, commodities, and supply chains – can support anti-corruption efforts and increase accountability in natural resource governance. Specifically, more robust codes of conduct and sectoral standards can impact producer behaviour and effectively promote transparency in target supply chains.⁵³ When considering the anti-corruption potential of supply chain initiatives, it is important that they and anti-corruption policies complement and reinforce each other, rather than fragment efforts towards improved anti-corruption outcomes.⁵⁴ Recent research suggests that holding supply chain actors to higher standards of corporate conduct, and improving the financial and technical capacity of anti-corruption agencies to carry out the functions necessary to manage natural resources, had had some impact on corruption reduction.⁵⁵

The second lesson that can be drawn from transparency and accountability initiatives used to promote the prevention of corruption is that evidence of their effectiveness ‘is very context-specific, and little is understood about the factors which make these impacts happen’.⁵⁶ Important contextual factors that can contribute to the effectiveness of anti-corruption initiatives include the nature of the state and its institutions, existing power relations, civil society capacity, the social contract between the state and its citizens, and the institutionalisation of accountability mechanisms.⁵⁷ Increased anti-corruption effectiveness depends on the source country’s commitment and evidence-informed policies and programmes to mitigate

53. Lambin et al., 2018.

54. Lambin et al., 2018.

55. Eisen et al., 2020.

56. McGee and Gaventa 2010, 21.

57. O’Neil, Foresti, and Hudson, 2007; Forster, Malena, and Singh, 2004.

corruption risks along natural resource supply chains and promote sustainable development outcomes.⁵⁸

A final lesson is that anti-corruption initiatives are most effective when integrated into a broader package of institutional reforms and when supported by other public policies. For instance, while social accountability mechanisms are crucial for creating more citizen awareness and can help transform citizens' knowledge of public policy and its implementation, such strategies can fail and only positively affect accountability when combined with actual information sharing and citizen deliberation. For instance, evidence from Ghana and Mozambique shows that information was provided exclusively to leaders and officeholders, therefore having little effect on citizens' knowledge and leading to more capture and embezzlement.⁵⁹

58. Eisen et al., 2020.

59. Rathinam et al., 2019.

Next steps for practitioners

While natural resource supply chain initiatives have the potential to increase transparency and accountability in natural resource governance, they also have limitations. Many of them focus on only one aspect of supply chains,⁶⁰ are based on untested assumptions or poorly articulated theories of change,⁶¹ or lack the means to tackle corruption at the intersection of source country markets and global supply chains. With these limitations in mind, practitioners could help improve such initiatives in several ways.

Incorporate criteria that address corruption risks into supply chain approaches

Support could be provided for traceability initiatives, associated processes of supply chain mapping, and supply chain transparency to help monitor and disclose sourcing information to stakeholders that can, in turn, contribute to better understanding and response to critical risks. This could include traceability initiatives with anti-corruption functions that gather information such as licensing and contract transparency, extraction and operations, transparency of government expenditures, and opportunities to connect with and understand the actors in the upstream supply chain.

Create a clear vision of what the supply chain initiative aims to achieve, and ensure governments, partners, and stakeholders agree with these goals

There is growing recognition for multistakeholder initiatives in natural resource governance that encourage representatives from civil society, government, and the private sector to establish credible learning platforms, standards, enforcement mechanisms, and labels, certifications, and/or ratings that drive progress on sustainable supply chains.⁶² The anti-corruption relevance of these initiatives could be improved by linking them with existing anti-corruption policies and legislation, such as public procurement policies,⁶³ and developing country-specific Theories of Change that include social and environmental dimensions.⁶⁴

60. Tacconi and Williams, 2020.

61. McGee and Gaventa 2010.

62. Searcy, 2017.

63. WWF, 2010.

64. Le Billon, Lujala, and Rustad, 2020.

Prioritise supply chain corruption risk assessments during the development of initiatives

This can help develop appropriate risk profiles and informed mitigation strategies that reduce the adverse effects of corruption. It will also help target initiatives towards supply chain links where effective mitigation strategies can be both feasible and have a potentially high impact, using tools such as political economy assessments to understand corruption risks and the patterns of incentives underlying governance and corruption in a given context. Political economy analysis can be carried out alongside or as part of other analytical work (eg stakeholder, institutional, and risk analysis) to understand the context.

Establish and support anti-corruption initiatives in natural resource supply chains as a component of broader anti-corruption strategies

The effectiveness of supply chain anti-corruption strategies can be improved through stakeholders leveraging existing national anti-corruption initiatives. In addition to targeting context-specific risks of corruption in supply chains, linking to broader anti-corruption measures at the national level offers entry points and opportunities for cooperation with relevant national anti-corruption and governance institutions.

References

- Acosta, A. M. 2013. [The impact and effectiveness of accountability and transparency initiatives: The governance of natural resources](#). *Development Policy Review* 31(s1): s89–105.
- Alexandra, G., Heller, P., and Kaufmann, D. 2018. [What makes an accountable state-owned enterprise?](#) Blog. Natural Resource Governance Institute.
- Anderson, C. 2017. [Sanctions, transparency, and accountability: The missing links in natural resource anti-corruption efforts](#). *Georgetown Journal of International Law* 48: 779–806.
- Auty, R. 1993. [Sustaining development in mineral economies: The resource curse thesis](#). Routledge.
- Bateman, A. and Bonanni, L. 2019. [What supply chain transparency really means](#). *Harvard Business Review*.
- Calland, R. and Bentley, K. 2013. [The impact and effectiveness of transparency and accountability initiatives: Freedom of information](#). *Development Policy Review* 31(s1): s69–87.
- Chêne, M. 2017. [Natural resource management transparency and governance: A literature review focusing on extractive industries](#). U4 Helpdesk Answer 2017:8. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute.
- Dermawan, A., Petkova, E., Sinaga, A. C., et al. 2011. [Preventing the risks of corruption in REDD+ in Indonesia](#). Working Paper 80. Center for International Forestry Research (CIFOR) and United Nations Office on Drugs and Crime (UNODC).
- Dietsche, E., Dodd, S., Haglund, D., et al. 2013. [Extractive industries, development and the role of donors](#). Oxford Policy Management.
- Donofrio, S., Rothrock, P., and Leonard, J. 2017. [Supply change: Tracking corporate commitments to deforestation-free supply chains](#). *Forest Trends*.
- Drakeford, B. M., Failler, P., Toorabally, B., et al. 2020. [Implementing the fisheries transparency initiative: Experience from the Seychelles](#). *Marine Policy* 119 (September): 104060.
- Eisen, N., Kaufmann, D., Heller, N., et al. 2020. [The TAP-Plus approach to anti-corruption in the natural resource value chain](#). Brookings Institution.
- Ensminger, J. 2017. [Corruption in community-driven development. A Kenyan case study with insights from Indonesia](#). U4 Issue 2017:9. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute.
- Forster, R., Malena, C., and Singh, J. 2004. [Social accountability: An introduction to the concept and emerging practice](#). *Social Development Papers* 76. World Bank.
- Fox, J. A. 2015. [Social accountability: What does the evidence really say?](#) *World Development* 72 (August): 346–361.

- Freitas, B. 2021. [Beneficial ownership in the fishing sector and links to corruption](#). TNRC Topic Brief.
- Gardner, T. A., Benzie, M., Börner, J., et al. 2019. [Transparency and sustainability in global commodity supply chains](#). *World Development* 121 (September): 163–177.
- Grant, J., Freitas, B., and Wilson, T. 2021. [Traceability systems: Potential tools to deter illegality and corruption in the timber and fish sectors?](#) TNRC Topic Brief.
- Gulbrandsen, L. H. 2010. [Mark of sustainability? Challenges for fishery and forestry and eco-labeling](#). *Environment: Science and Policy for Sustainable Development* 47(5): 8–23
- Hanich, Q. and Tsamenyi, M. 2009. [Managing fisheries and corruption in the Pacific Islands region](#). *Marine Policy* 33(2): 386–392.
- Hart, E. 2022. [Examining social accountability as an anti-corruption approach in conservation and natural resource management](#). TNRC Introductory Overview.
- Hickey, S. and King, S. 2016. [Understanding social accountability: Politics, power and building new social contracts](#). *The Journal of Development Studies* 52(8): 1225–1240.
- Hunter, J. and Shah, A. 2000. [Anti-corruption policies and programs: A framework for evaluation](#). Policy Research Working Paper 2501. World Bank.
- Johnsøn, J. 2012. [Theories of change in anti-corruption work: A tool for programme design and evaluation](#). U4 Issue 2012:6. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute.
- Kaufmann, D. 2015. *Evidence-based reflections on natural resource governance and corruption in Africa*. In [Africa at a fork in the road: Taking off or disappointment once again?](#), Zedillo, E., Cattaneo, O., and Wheeler, H. (eds) 239–260. Yale Center for the Study of Globalization.
- Lambin, E. F., Gibbs, H. K., Heilmayr, R., et al. 2018. [The role of supply-chain initiatives in reducing deforestation](#). *Nature Climate Change* 8: 109–116.
- Landau, K. and Bassetti, V. 2020. [The evolution of the EITI and next steps for tackling extractive industries corruption](#). Blog. Brookings Institution.
- Le Billon, P., Lujala, P., and Rustad, S. A. 2020. [A theory of change for the Extractive Industries Transparency Initiative: Designing resource governance pathways to improve developmental outcomes](#). U4 Issue 2020:11. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute.
- McDermott, C. L., Irland, L. C., and Pacheco, P. 2015. [Forest certification and legality initiatives in the Brazilian Amazon: Lessons for effective and equitable forest governance](#). *Forest Policy and Economics* 50 (January): 134–142.
- McGee, R. and Gaventa, J. 2010. [Review of impact and effectiveness of transparency and accountability initiatives: Synthesis report](#). Institute of Development Studies.
- Mena, S. and Palazzo, G. 2012. [Input and output legitimacy of multi-stakeholder initiatives](#). *Business Ethics Quarterly* 22(3): 527–556.
- Menocal, A. R., Taxell, N., Johnsøn, J. S., et al. 2015. [Why corruption matters: Understanding causes, effects and how to address them](#). *Evidence paper on corruption*. DFID.

- Milder, J. C., Newsom, D., Lambin, E., et al. 2016. [Measuring impacts of certification on biodiversity at multiple scales: Experience from the SAN/Rainforest Alliance system and priorities for the future](#). *Policy Matters* 21: 12–24.
- OECD. 2016. [Corruption in the extractive value chain: Typology of risks, mitigation measures and incentives](#).
- O’Neil, T., Foresti, M., and Hudson, A. 2007. [Evaluation of citizens’ voice and accountability: Review of the literature and donor approaches](#). DFID.
- Rathinam, F., Cardoz, P., Siddiqui, Z., et al. 2019a. [Transparency and accountability in the extractives sector: A synthesis of what works and what does not](#). 3ie Working Paper 33. International Initiative for Impact Evaluation (3ie).
- Rosenbaum, K. L. 2005. [Tools for civil society action to reduce forest corruption: Drawing lessons from Transparency International](#). World Bank.
- Searcy, C. 2017. [Multi-stakeholder initiatives in sustainable supply chains: Putting sustainability performance in context](#). *Elementa: Science of the Anthropocene* 5(73).
- Silvestre, B. S., Monteiro, M. S., and Viana, F. L. E. et al. 2018. [Challenges for sustainable supply chain management: When stakeholder collaboration becomes conducive to corruption](#). *Journal of Cleaner Production* 194 (September): 766–776.
- Smith, A. and Grant, J. 2021. [Keeping better company: Engaging the private sector to reduce forest sector-related corruption risk](#). TNRC Topic.
- Søreide, T. and Truex, R. 2011. [Collaboration against corruption?: Multistakeholder groups in natural resource management](#). U4 Issue 2011:5. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute.
- Søreide, T. and Truex, R. 2013. [Multi-stakeholder groups for better sector performance: A key to fighting corruption in natural-resource governance?](#) *Development Policy Review* 31(2): 203–217.
- Søreide, T. and Williams, D. A. 2013. [Certified integrity? Forest certification and anti-corruption](#). U4 Issue 2013:1. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute.
- Stephenson, M. C., and Schütte, S. A. 2019. [An International Anti-Corruption Court? A synopsis of the debate](#). U4 Brief 2019:5. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute.
- Sundström, A. 2015. [Covenants with broken swords: Corruption and law enforcement in governance of the commons](#). *Global Environmental Change* 31 (March): 253–262.
- Tacconi, L. and Williams, D. A. 2020. [Corruption and anti-corruption in environmental and resource management](#). *Annual Review of Environment and Resources* 45(1): 305–329.
- TNRC. 2019. [A guide to identifying corruption risks along natural resource supply chains](#).
- Transparency International. n.d. [What is corruption?](#)
- UN Global Compact. 2016. [Fighting corruption in the supply chain: A guide for customers and suppliers](#).
- Vaughn, D. and Nikolaieva, O. 2021. [Launching an effective anti-corruption court: Lessons](#)

[from Ukraine](#). U4 Practice Insight 2021:1.
Bergen: U4 Anti-Corruption Resource Centre,
Chr. Michelsen Institute.

Villar, P. F. 2022. [An assessment of the Extractive Industries Transparency Initiative \(EITI\) using the Bayesian Corruption Indicator](#).
Environment and Development Economics
27(5): 414–435.

Williams, D. A. and Dupuy, K. 2016. [At the extremes: Corruption in natural resource management revisited](#). U4 Brief 2016:6.
Bergen: U4 Anti-Corruption Resource Centre,
Chr. Michelsen Institute.

WWF. 2010. [Certification and roundtables: Do they work?](#)

About the author

Achiba A. Gargule

Achiba A. Gargule is a human geographer focusing on natural resources governance, specialising in development policy, land-rights inequities, and frontier transformations.

Keywords

commodities – environmental governance – extractive industries – fisheries – forestry – natural resource management – renewable resources – supply chains – trade

How to cite

Gargule, A.; (2023) Natural resource commodity supply chains. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute (U4 Issue 2023:5)

Publication

First published 21 June 2023

Disclaimer

All views in this text are the author(s)', and may differ from the U4 partner agencies' policies.

Cover photo

Adam Cohn – license: CC-BY-NC-ND

<https://www.flickr.com/photos/adamcohn/52596083700/>

Creative commons

This work is licenced under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International licence (CC BY-NC-ND 4.0)



U4 partner agencies

German Corporation for International Cooperation – GIZ

German Federal Ministry for Economic Cooperation and Development – BMZ

Global Affairs Canada

Ministry for Foreign Affairs of Finland

Ministry of Foreign Affairs of Denmark / Danish International Development Assistance – Danida

Swedish International Development Cooperation Agency – Sida

Swiss Agency for Development and Cooperation – SDC

The Norwegian Agency for Development Cooperation – Norad

UK Aid – Foreign, Commonwealth & Development Office

Corruption erodes sustainable and inclusive development. It is both a political and technical challenge. The U4 Anti-Corruption Resource Centre (U4) works to understand and counter corruption worldwide.

U4 is part of the Chr. Michelsen Institute (CMI), an independent development research institute in Norway.

U4 ANTI-CORRUPTION
RESOURCE CENTRE