

Integrity risks in carbon markets in Sub-Saharan Africa:

Is the Voluntary Carbon Market salvageable?

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0.0 Summary

I ask how far REDD projects reduce emissions and provide community benefits in Africa. I look at the Voluntary Carbon Market (VCM) more generally and ask whether it is salvageable. The paper is based on a review of the academic literature, media reports, a small number of interviews and email exchanges with market players, and a career spent mostly in the 'development industry'.

To date, REDD (Reducing Emissions from Deforestation and Forest Degradation), has been the main external carbon market intervention in Africa. I briefly review REDD at the global and African levels and present a case study of REDD in Tanzania. I then review the literature on the VCM. I do not review the Clean Development Mechanism (CDM), which shares a lot of the weaknesses of the VCM, albeit on a much larger scale.¹

The reviews of REDD in Africa/Tanzania and the VCM both point to the same conclusion: carbon markets have failed as a result of inherent difficulties of definition, measurement,² complexity, fragmentation, and the institutional characteristics of individual countries attempting to set up carbon markets.³ As a result, forest-dwellers and neighbouring communities are unlikely to benefit from their conservation efforts, although they are routinely cited as among the major winners from the commercialisation of tropical forests.

The question then is: can the VCM be salvaged?

The paper recommends that TI's National Chapters, board, Secretariat and International Council collaborate in a comprehensive review of carbon markets to establish an evidence-based policy.

¹ By 2018, the CDM had registered more than 8,100 projects and programmes in 111 developing countries worth more than *USD 300 billion*, and leading (it is claimed) to the 'reduction or avoidance of 2 billion tonnes of carbon dioxide.' See: <https://unfccc.int/news/clean-development-mechanism-passes-new-milestone>. The academic literature on the CDM is far less upbeat. Nearly 70 percent of CDM offsets were traded in China and India. '... the vast majority of those credits *were not genuine*—either the projects *would have happened anyway* ... or they were credited for *far more reductions than actually occurred*, or both.' Joseph Romm 2023. 'Are carbon offsets unscalable, unjust, and unfixable—and a threat to the Paris Climate Agreement?' University of Pennsylvania Center for Science, Sustainability, and the Media White Paper, June. (Emphasis added). See: <https://web.sas.upenn.edu/pcssm>.

² A carbon credit (equal to a ton of carbon dioxide) would fill a balloon ten metres high.

³ Haya, B. K. *et al.* 2023, 'Quality assessment of REDD+ carbon credit projects.' Berkeley Carbon Trading Project, September 15. See: <https://carbonmarketwatch.org/publications/quality-assessment-of-redd-carbon-credit-projects/>

1.0 Background to REDD

In 2023, 'The world lost 10 football fields' worth of primary forest per minute.'⁴ REDD involves 'developed countries paying developing countries carbon offsets for their standing forests.'⁵

REDD and REDD+⁶ are intended to create a global framework to halt deforestation, reduce poverty, conserve biodiversity and sustain vital ecosystem services. The REDD concept was launched in 1997, but it did not become a reality until COP13 in Bali in 2007.⁷ Contentious issues debated during this period included: whether REDD should be allowed to generate carbon credits under the CDM;⁸ what activities should be included in the definition of REDD; questions of measurement, reporting and verification; the rights of indigenous peoples; financing options; and institutional arrangements.⁹

In 2011, the parties to the United Nations Framework Convention on Climate Change (UNFCCC) agreed that results-based REDD+ payments to developing countries 'may come from a wide variety of sources, public and private, bilateral and multilateral.'¹⁰ In practice, almost all REDD funding is from bilateral and multilateral ODA¹¹ and private philanthropies. Between 2006 and 2014, 21 countries pledged almost USD5 billion to REDD through bilateral agreements.¹² From 2008–2021, eight climate funds, three of them managed by the World Bank, financed over 300 REDD+ projects worth USD

⁴ World Resources Institute 2024. 'New Data: The Tropics Lost 3.7 million Hectares of Primary Forest in 2023', see: <https://mail.google.com/mail/u/1/#inbox/FMfcgzGxSbnRmFmMjpGrNGXnfpFrrWhW>

⁵ See: <https://www.un-redd.org/sites/default/files/2021-10/ENGLISH%20FAQs-%20July%202011.pdf>. Emphasis in the original.

⁶ REDD + includes non-direct forest protection interventions, including, for example, mini solar plants and efficient energy use. 'REDD' in the rest of the paper includes REDD+.

⁷ REDD was 'launched' at the Kyoto Protocol. See Carbon Planet 2009. 'The History of REDD Policy', White Paper, 4 December

⁸ 'No' was the answer. I do not know how many current REDD+ projects attract carbon credits.

⁹ Carbon Planet *op. cit.*

¹⁰ See: <https://euredd.efi.int/about/about-redd/how-redd-developed/#:~:text=REDD%2B%20was%20created%20through%20international%20negotiations%20under%20the,deforestation%20and%20forest%20degradation%E2%80%99%2C%20hence%20the%20acronym%20REDD.>

¹¹ Overseas Development Assistance (ODA) consists of loans to poor countries with a grant element of at least 25 percent. See: [Overseas Development Assistance - Search \(bing.com\)](https://www.bing.com/search?q=Overseas+Development+Assistance). According to Marigold Norman and Smita Nakhooda (no date) 'The State of REDD+ Finance': 'The forest carbon offset market is dominated by voluntary markets, with the value of compliance markets falling significantly in recent years.' 'While hopes were high that REDD+ would attract investment from the private sector, the absence of a compliance market for REDD+ credits has meant that private sector engagement and investments have been low (Diaz et al, 2011).' See: <https://www.cgdev.org/sites/default/files/CGD-Norman-Nakhooda-Climate-Forests-5-REDD-Finance.pdf>. The authors cite only: 'US\$8.2 million in private finance and US\$101 million from private foundations across ten tropical forest countries between 2009 and 2012.' See: <http://reddx.forest-trends.org/>

¹² The countries included Australia, Austria, Belgium, Canada, Denmark, the European Union, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, Netherlands, Norway, Slovakia, Spain, Sweden, Switzerland, the UK and the US. See: <https://www.cgdev.org/sites/default/files/CGD-Norman-Nakhooda-Climate-Forests-5-REDD-Finance.pdf>

2.9billion.¹³ As of 2020-21, the Bank's Forest Carbon Partnership Facility (FCPF), Carbon and Readiness Funds (FCPF- CF/RF), BioCarbon Fund, the Forest Investment Program (FIP), and the UN-REDD Programme had approved USD 1.4 billion for project activities.¹⁴

The costs and complexities of creating and implementing an official REDD policy framework in poor countries have meant that the majority of REDD finance has gone to individual projects, not to national programmes.¹⁵

REDD is designed to increase forest carbon stocks in the most forested countries in the world, starting with the biggest - Brazil, Indonesia and the Democratic Republic of Congo. Currently, over 60 countries are implementing REDD projects.¹⁶ Its supporters present REDD as a great success. The UN, which runs UN-REDD with the FAO, UNEP, and UNDP, claims that '17 countries reported a reduction of 11.6 billion tons of carbon dioxide...' All countries stressed that indigenous communities, whose lives rely heavily on forests, as well as youth and women were key stakeholders in the process.'¹⁷

No doubt there are good and bad REDD projects, but the huge achievements claimed by the UN sit uneasily with the fundamental conceptual and implementation problems that have beset REDD to date. UN-REDD projects have been singled out for special criticism.¹⁸

Here are some major concerns raised by academics and investigative journalists concerning REDD projects:

¹³ In order of importance: the Amazon Fund (USD705.3m, 102 projects approved); the Forest Investment Program (FIP) (\$617.7m, 53); the Green Climate Fund (GCF) (\$496.7m, 8); the UN-REDD Programme (\$342.0m, 39), the Forest Carbon Partnership Facility (FCPF) (\$314.3m, 46); the Central African Forest Initiative (CAFI) (\$228.5m, 15); the BioCarbon Fund \$98.3m, 5); and the Congo Basin Forest Fund (CBFF) (\$83.1m, 37). See: https://climatefundsupdate.org/wp-content/uploads/2022/03/CFF5-REDD-Finance_ENG-2021.pdf

¹⁴ See: https://climatefundsupdate.org/wp-content/uploads/2022/03/CFF5-REDD-Finance_ENG-2021.pdf

¹⁵ Only about USD1.5 billion has been disbursed to developing countries for achieving REDD+ at a national or subnational scale. Private investors prefer sector-specific credits, for example in renewable energy, cooking-stoves, airline offsets, See:

https://redd.unfccc.int/uploads/2_244_reddplus_pathwaystobridgeprojectandjurisdictionalprograms.pdf

¹⁶ See: [Copilot with GPT-4 \(bing.com\)](https://www.bing.com/Copilot)

¹⁷ See: <https://unfccc.int/news/a-decade-of-redd-notable-achievements-by-forest-nations>

¹⁸ With negative impact on share prices. Temple (2023) identifies: 'a fundamental downshift in the demand for riskier credits,' particularly the UN-developed REDD+ forestry credits that were the subject of a scathing study in September [2023]. James Temple 2023. 'The growing signs of trouble for global carbon markets', MIT Technology Review, 2 November. See: <https://www.technologyreview.com/2023/11/02/1082765/the-growing-signs-of-trouble-for-global-carbon-markets/> The author is citing Carbon Direct's 2023 report on the 'state of the voluntary carbon market', Oct 25, 2023. See: <https://www.carbon-direct.com/insights/carbon-direct-announces-the-2023-state-of-the-voluntary-carbon-market-report>. See also Heidi Blake 2023. 'The Great Cash-for-Carbon Hustle', The New Yorker, 16 October. See: <https://www.newyorker.com/magazine/2023/10/23/the-great-cash-for-carbon-hustle>

- Research published in *Science* in 2023 claims that over ninety percent of credits in a sample of 26 REDD sites in Peru, Colombia, Democratic Republic of Congo (DRC), Tanzania, Zambia, and Cambodia do not represent real reductions in carbon emissions.¹⁹
- Income from REDD is not distributed equitably.²⁰
- Central and local government taxes reduce the benefits to local communities.²¹
- Some REDD+ initiatives displace forest-dependent communities from their ancestral lands.²²
- For forest-dwelling communities, REDD+ projects can make it harder to assure food security, housing, medicines, and fodder.²³
- REDD is a *distraction from the 'Big Issue' of reducing emissions from fossil fuels.*²⁴

Other academic research comes to extremely damning conclusions. After reviewing the literature on the quality of REDD+ projects across the world, Haya et al. (2023) concluded that:

'... the current design of the carbon credit market is *not effective at reducing deforestation and protecting people.*' '... current REDD+ methodologies generate credits that represent a *small fraction* of their claimed climate benefit. Estimates of emissions reductions were exaggerated ... when compared to the published literature and our independent quantitative assessment.'²⁵

¹⁹ The authors found that: 'Only one of the seven Colombian project sites, and one of two Cambodian sites, achieved significant deforestation reductions. ... No evidence of avoided deforestation was found for the REDD+ sites in the DRC, Tanzania, and Zambia ...' A. Thales P. et al. 2023. 'Action needed to make carbon offsets from forest conservation work for climate change mitigation', *Science*, Vol 381, Issue 6660, 24 August, pp. 873-877. See: <https://www.science.org/doi/10.1126/science.ade3535>.

²⁰ John Cannon 2023. 'REDD+ projects falling far short of claimed carbon cuts, study finds', Mongabay 25 August. See: <https://news.mongabay.com/2023/08/redd-projects-falling-far-short-of-claimed-carbon-cuts-study-finds/>. See also: Isaac Mwangi 2024. 'Involve people in matters of climate change', Arusha News, 1 May.

²¹ Carbon Brief Infographic claims that: 'Scores of investigations have uncovered evidence of carbon offset projects forcing local people from their homes and farmland.' Carbon Brief infographic. See: <https://interactive.carbonbrief.org/carbon-offsets-2023/infographic.html>. According to Kashwan (2-15) '... minorities, indigenous people, the poor, and other marginalized groups that live in forest areas often end up paying more than their fair share of the costs of environmental cleanup and conservation while getting less in return. Prakash Kashwan 2015. 'Who Benefits From REDD+? Lessons From India, Tanzania, and Mexico', *Climate Diplomacy*, 3 August. See: <https://climate-diplomacy.org/magazine/environment/who-benefits-redd-lessons-india-tanzania-and-mexico>.

²² 'Nine reasons why REDD is a false solution: New Report from Friends of the Earth International', See: <https://foe.org/blog/2014-10-nine-reasons-why-redd-is-a-false-folution-friends-of/>

²³ Vijay Kolinjivadi 2015. 'The problem with REDD+', *Resilience*, Post Carbon Institute, 23 December <https://www.resilience.org/stories/2015-12-23/the-problem-with-redd/>

²⁴ Fern 2023. 'Trading carbon in the midst of a climate crisis is like moving deckchairs whilst the Titanic sinks', <https://www.fern.org/issues/carbon-trading/>. See also: <https://www.youtube.com/watch?v=7MJZmzOh4Po>

²⁵ Haya, B. K., Alford-Jones, K., Anderegg, W. R. L., Beymer-Farris, B., Blanchard, L., Bomfim, B., Chin, D., Evans, S., Hogan, M., Holm, J. A., McAfee, K., So, I. S., West, T. A. P., & Withey, L. 2023, 'Quality assessment of REDD+ carbon credit projects.' Berkeley Carbon Trading Project, 15 September <https://gspp.berkeley.edu/research-and-impact/centers/cepp/projects/berkeley-carbontrading-project/REDD+>. Emphasis added.

Though most of the criticisms of REDD projects are not new, the 2023 research findings and simultaneous newspaper investigations contributed to the virtual collapse of the VCM during recent months, as described in this report.²⁶

1.1 REDD in Africa

“Together, we can unlock billions for climate finance and economic development in Africa.”²⁷

Sub-Saharan Africa (SSA), with the exception of South Africa, has not been much involved in compliance carbon markets under the Clean Development Mechanism (CDM).²⁸

REDD projects are the most common form of forest protection-related carbon credit initiatives in Africa. In 2020, there were 123 ongoing or completed REDD projects in Africa (see sidebar).²⁹ REDD+ projects were implemented by a multiplicity of agencies, the biggest of which is UN-REDD. REDD projects in Africa are financed by bilateral donors, the UN and the World Bank’s Forest Carbon Partnership Facility (FCPF).³⁰ Their performance is hotly disputed.

In addition to the inherent problems with the REDD concept discussed above, a number of local factors also threaten to undermine REDD projects, including the routine lack of significant benefits afforded to local communities. In 2010, before the REDD rollout, Sandbrook et. al. warned that REDD schemes:

REDD projects in Sub-Saharan Africa, 2020	
Kenya	29
Uganda	20
DRC	19
Tanzania	14
Ethiopia	8
Cameroun	8
Ghana	7
Mozambique	6
Zambia	5
Sierra Leone	3
Liberia	1
Rwanda	1
Togo	1
Zimbabwe	1
Total	123

²⁶ It is worth noting that this is not the first time the carbon market has collapsed. ‘By the end of 2012, the price of a ... credit, which had peaked at twenty-five euros, had tumbled to thirty-nine cents.’ Heidi Blake 2023. ‘The Great Cash-for-Carbon Hustle’, The New Yorker, 16 October. Note that it was the compliance, not the voluntary market, that collapsed. See: <https://www.newyorker.com/magazine/2023/10/23/the-great-cash-for-carbon-hustle>.

²⁷ Citing Joseph Nganga, Steering committee member and Vice President, Africa at the Global Energy Alliance for People and Planet.

²⁸ Only 39 projects are REDD+ initiatives, while the remaining 97 are afforestation and reforestation projects. Liberia, Ghana, DRC, Zambia, Nigeria and Ethiopia are among the main African REDD+ countries. See: [How many REDD projects are there in Africa? - Search \(bing.com\)](#)

²⁹ See REDD+ Database: <https://www.reddprojectsdatabase.org/view/countries.php>. For different numbers see: Sylvera 2023. ‘What is the state of REDD+ carbon credits in 2022?’, November 2. See: <https://www.sylvera.com/blog/redd-carbon-credits-2022>

³⁰ The FCPF describes itself as ‘... a global collaboration involving governments, businesses, civil society, and indigenous peoples...’to protect forests and maintain carbon stocks. FCPF has a current funding envelope of \$900 million. See: [World Bank Pays Vietnam Over \\$51 Million in Carbon Credits](#). See also: Sylvera 2023. ‘What is the state of REDD+ carbon credits in 2022?’, November 2. See: <https://www.sylvera.com/blog/redd-carbon-credits-2022>. The WB also administers the FIP.

'... will tend to increase the political incentives for central government bureaucracies to retain or re-centralize control over forests and the trade in carbon offsets.'³¹ 'In governance contexts characterized by weak rule of law and low levels of public accountability, REDD payments are likely to increase corruption and elite capture around forest governance institutions and forest product harvests.'³² 'Attempts to sustain forest cover through REDD may undermine decentralized governance associated with effective carbon storage (as well as provision of local livelihood benefits).'³³

Discussing the roll-out of REDD around 2010-11, Transparency International (TI) commented:

'Forest communities are already becoming victims of fraud as carbon brokers and project developers have moved aggressively to secure carbon rights through non-transparent negotiations with government officials. Increased funding for forests will need to be matched with strong coordination and oversight in order to ensure that the money reaches the communities that need it yet does not increase incentives for corruption.'³⁴

In a number of African countries, communities have been sold short by REDD project promoters, as flagged by TI. **Box 1** provides a current example.

Box 1: Kariba carbon credit collapse

In October 2023, Kariba, a US\$100m forest-protection project in Zimbabwe, collapsed when **South Pole**, the US company that sold most of the credits to the project, terminated its contract with **Carbon Green Investments**, the local project implementer. It was found that most of the project's proceeds have gone to the two partners of CGI rather than to people in the communities combatting deforestation. The project – at the time the second biggest in the world -- had overestimated its climate benefits by a factor of at least five while delivering less money than indicated to communities. Verra, that oversees the Kariba project, announced it would put the project "on hold" pending an investigation. Dozens of corporate giants, including Volkswagen AG, Nestle, L'Oreal, Gucci and McKinsey, have purchased millions of credits from Kariba. But the market for Kariba credits has dwindled as scrutiny of the project increases.

Source: Ben Elgin 2023. 'Carbon market faces chaos as African mega-project collapses', Bloomberg Green

<https://mail.google.com/mail/u/1/#inbox/FMfcgzGwHLrrNpmrQgwHIFhftXCPMMJH>

Despite such shortcomings, in COP27 (November 2022) a coalition of private and public interests, including international organisations, carbon credit verifiers, banks, consultancies, and INGOs announced the Africa Carbon Markets Initiative (ACMI), aiming 'to support the growth of carbon credit production and create jobs in Africa.'³⁵

³¹ Chris Sandbrook, Fred Nelson, William M. Adams and Arun Agrawal 2010. 'Carbon, forests and the REDD paradox', *Forum, Fauna & Flora International, Oryx*, 44(3), 330–334, p332. The article argues that community-owned and -managed forests better protect against deforestation than state-managed schemes.

³² Sandbrook et al. *op. cit.*

³³ *Ibid.*

³⁴ TI does not tell us how this worthy objective is to be achieved. Transparency International 2011. 'Global Corruption Report: Climate Change', Earthscan, p xxxiii.

³⁵ CLIMATE CHAMPIONS 2022. 'Africa Carbon Markets Initiative launched to dramatically expand Africa's participation in voluntary carbon market', 8 November. ACMI involved 'collaboration with The Global Energy Alliance for People and Planet (GEAPP), Sustainable Energy for All (SEforALL), and the UN Economic Commission

The ACMI Roadmap report ‘Harnessing carbon markets for Africa’³⁶ identifies no less than 13 ‘action programs’ to support the growth of voluntary carbon markets ... across Africa. Kenya,³⁷ Malawi, Gabon, Nigeria and Togo announced their commitment to ‘scaling’ voluntary carbon markets. **Box 2** lists the main aims of the ACMI.

Box 2: The Africa Carbon Markets Initiative aims to:

- Produce 300m carbon credits annually by 2030, and 1.5bn annually by 2050.
- Unlock USD 6 billion in revenue by 2030 and over 120 billion by 2050.
- Support 30 million jobs by 2030 and over 110 million jobs by 2050.
- Distribute revenue equitably and transparently with local communities.
- Major carbon credit buyers and financiers, such as Exchange Trading Group, Nando’s, and Standard Chartered announced plans to set up an advance market commitment (AMC) for high-integrity African carbon credits.

Former President of Colombia, Ivan Duque, and Verra’s CEO David Antonioli: ‘... announced the creation of a new consortium, the Nature Framework Development Group (NFDG), consisting of Conservation International, Verra, International Union for Conservation of Nature (IUCN), Conservation Finance Alliance, the Biodiversity Consultancy, Great Barrier Reef Foundation, and Blue Nature Alliance with support from McKinsey & Company, [which] aims to develop a market leading nature/ biodiversity credit.’

Source: Climate Champions 2022. ‘Africa Carbon Markets Initiative launched to dramatically expand Africa’s participation in voluntary carbon market’, 8 November. See:

<https://climatechampions.unfccc.int/africa-carbon-markets-initiative/>

The ACMI is led by a thirteen-member steering committee consisting of African leaders, CEOs, and carbon credit experts.’ The AVCM would address African countries’ governance deficits and weaknesses of the current VCM. Nando’s, and Standard Chartered announced plans to set up an ‘advance market commitment’ (AMC) of hundreds of millions of dollars for ‘high-integrity African carbon credits.’

Quick to invest in the ACMI concept was a recent Dubai start-up known as Blue Carbon, which rapidly clinched deals with five African countries covering 7.5m hectares ... to ‘protect’ their forests. Owned by a member of the Emirati royal family,³⁸ the fledgling company³⁹ signed deals with the governments of Zimbabwe, Tanzania (see below),

for Africa, with the support of the UN Climate Change High Level Champions – Dr. Mahmoud Mohieldin and Nigel Topping. See: <https://climatechampions.unfccc.int/africa-carbon-markets-initiative/>.

³⁶ See: <https://africacarbonmarkets.org/>

³⁷ The biggest investors in Kenya are Delta, Netflix, BHP, Nespresso, and Natwest. Allan Odhiambo 2024. ‘Big firms buying Kenya’s carbon credits revealed’, Business Daily, 17 April. See: <https://www.businessdailyafrica.com/bd/economy/big-firms-buying-kenya-s-carbon-credits-revealed--4591708>

³⁸ Blue Carbon’s chief executive is Sheikh Ahmed Dalmook Al Maktoum. He has no previous experience in nature conservation. See: Phillip van Niekerk 2023. ‘Dubai carbon trader buys up African forests — saving the planet or environmental colonialism?’, Daily Maverick, 28 November. <https://www.dailymaverick.co.za/article/2023-11-28-dubai-carbon-trader-buys-up-african-forests/>.

³⁹ The company was launched in 2022. See: <https://climatechampions.unfccc.int/africa-carbon-markets-initiative/>. Blue Carbon specialises, as the name suggests, in marine conservation, in particular mangrove forests, tidal marshes, seaweed and seagrass. Tanzania has its own blue carbon company: <https://bluecarbontanzania.or.tz/about-us/>

Liberia,⁴⁰ Zambia and Kenya in the months⁴¹ before COP28 in Dubai.⁴² The Liberian deal involved leasing one tenth of the country's land area for a thirty-year period. The deal was facilitated by one 'Samuele Landi, previously convicted of bankruptcy fraud in Italy, [who] serves as both an advisor to Blue Carbon LLC and Liberia's consul general in the UAE.'⁴³ The deal threatens a large ongoing Norwegian forest protection project within the newly leased area.⁴⁴

TI comments that:

'... these deals may endanger the lives and livelihoods of millions of people and hinder the ability of these countries to meet their own climate commitments, ... Critics have referred to the deals ... as a modern-day land grab or carbon colonialism ,... .⁴⁵

The lack of transparency in negotiations between state and private actors over carbon projects '... can facilitate corruption and lead to the dispossession of those who rely on the land for their survival.'⁴⁶

One critical observer saw the move as '*the latest attempt by the petrostate to use green initiatives as a smokescreen for its plans to continue pumping fossil fuels.*'⁴⁷

Prompted by the ACMI, African countries that hadn't already done so, rushed to introduce legislation and regulations to facilitate the carbon trade.

To succeed, ACMI will have to deal with local obstacles that have plagued carbon credit projects in Africa to date, including: the recentralisation of control of forests (discussed above); the failure of national justice systems to clearly define and fairly enforce property rights;⁴⁸ underfunding, understaffing, and low skill levels of state institutions and functionaries responsible for implementing and overseeing carbon credit projects; diminishing civic space and increasing harassment of journalists and civil activists under

⁴⁰ Taiwo Adebayo and the Associated Press 2024. 'Carbon colonialism' in Africa meets resistance as companies seek to sell carbon credits from conservation projects that often upend local livelihoods—or worse', 8 April ['Carbon colonialism' in Africa meets resistance | Fortune](#)

⁴¹ Negotiations with foreign investors are often long and drawn-out. Those that are so rapidly finalised suggest high-level facilitation.

⁴² Angela Dewan 2023. 'A UAE company has secured African land the size of the UK for controversial carbon offset projects', CNN, 23 November, see: <https://edition.cnn.com/2023/11/22/climate/uae-cop28-adnoc-fossil-fuels-expansion-climate-intl/index.html>. Italics added. In November 2022, Blue Carbon clinched a similar deal with Papua New Guinea. See: <https://reddmonitor.substack.com/p/blue-carbon-llc-a-united-arab-emirate>

⁴³ Transparency International 2024. 'Green dreams, carbon schemes', The Week in Corruption, 26 April. See: <https://mail.google.com/mail/u/1/#inbox/FMfcgzGxStsqDQZjNkwQwCZXRvzJZqCR>

⁴⁴ Dewan *op. cit.*

⁴⁵ The article makes the link between carbon credit corruption and 'the broader issue of land corruption in Africa. Transparency International, *op. cit.*

⁴⁶ *Ibid.*

⁴⁷ Dewan *op. cit.*

⁴⁸ Cockcroft reports that REDD forest protection projects in the DRC proved problematic because commercial forestry was largely informal and unregulated, a common problem in Africa. At the time, REDD implementation mechanisms 'were untested and ... uncoordinated.' Laurence Cockcroft 2012. *Global Corruption: Money, Power and Ethics in the Modern World*. London: I.B. Tauris, August.

increasingly authoritarian regimes; and the practice of rent-seeking by public and private actors at all levels.⁴⁹

Tanzania's experience with REDD is discussed below.

1.2 Tanzania's experience with aid-financed REDD projects

Over the last decade and a half, Tanzania has hosted 14 REDD projects. While some of these projects have been implemented with integrity and benefits have accrued to communities involved in forest protection and restoration, too many projects have yielded minimal or negative results. REDD projects began to take off in 2008.⁵⁰

REDD was described as: '... an effort to create a financial value for the carbon stored in forests, offering incentives ... to reduce emissions from forested lands and invest in low carbon paths to sustainable development.'⁵¹

REDD projects were negotiated between the main donor, NORAD, and the government, with state and non-state entities, mostly well-established Tanzanian NGOs, responsible for implementing projects. 'Phase 1' of REDD concentrated on establishing a REDD policy and implementation framework and building state capacity to implement and regulate REDD projects. Despite some capacity building, a 2012 REDD+ Capacity Needs Assessment identified 17 'capacity gaps' at central, local and village levels. In particular:

There is extremely limited knowledge and technical skills at the district and village level which is the core ... sphere of REDD+ implementation.'⁵² In addition, '*weak forest governance, an unclear mechanism for benefit sharing ... and poor enforcement of forest laws and regulations* remain challenges likely to affect REDD+ implementation.'⁵³ Furthermore, 'while REDD+ in Tanzania is built on the existing institutional systems such as PFM [participatory forest management],⁵⁴ these have *so far failed to generate tangible benefits for local communities and contribute to sustainable management of forests.*'⁵⁵

Bureaucratic and political obstacles to efficient and effective climate governance were identified in a 2018 study, suggesting that 'capacity gaps' continued to be a chronic

⁴⁹ These pitfalls apply to projects in general. For a Tanzania example see: Centre for Strategic Litigation 2024. 'Tanzania Civic Space Monitor 2023', forthcoming.

⁵⁰ Patrick Kisembo 2008. 'Tanzania to curb deforestation emissions', Guardian 15 October. One of the first REDD initiatives was undertaken by The Community Forest Conservation Network of Tanzania (MJUMITA) in partnership with Tanzania Forest Conservation Group (TFCG). See: <https://mjumita.or.tz/project/redd-in-tanzania/>.

⁵¹ 'REDD+' goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks.' Karen Edwards, Kahana Lukumbuzya and George Kajembe 2012. 'REDD+ Capacity Needs Assessment in Tanzania', Policy Brief LTS International for the Ministry of Natural Resources and Tourism (MNRT) and UN-REDD Programme in Tanzania, August.

⁵² Edwards et al., *op. cit.*, pp5-6.

⁵³ *Ibid.*

⁵⁴ In 2007, 'PFM was operating or being established in over 1,800 villages and on over 3.6 million hectares of forest land...' or about 11 percent of the total forest cover. Gagulwa Msusu 2007. 'Participatory forest management in Tanzania', Regalia Media, 6 June

⁵⁵ *Ibid.* Emphasis added.

problem.⁵⁶ In addition ‘...there is weak coordination between peers and levels of government, limited scientific and policy information, and insufficient capacity and resources.’⁵⁷

But officially, the eight REDD projects in Tanzania were described as a success, by both internal and external reviews.⁵⁸

The following textbox describes how the arrival of REDD undermined existing community-based approaches to natural resource management rather than benefiting from them, as claimed above.

Box 3: The path from PFM to REDD in Tanzania

‘Launched in 2008 with USD80million in grants, Norway’s climate forest engagement in Tanzania not only failed to produce a model that worked but also ignored promising forestry initiatives that existed at the time.’ This represents a lost opportunity for forests and people in Tanzania as REDD disregarded on-going processes and set up parallel structures. The REDD grant was used for institution building, developing a strategy and action plan, and supporting conservation organisations to carry out nine REDD+ pilot projects across the country. At the time REDD emerged, Tanzania was pursuing a strategy of Participatory Forest Management (PFM) in which donors committed USD60m in policy reform and pilot projects. Participatory projects were said to show promise, but REDD prevented the PFM strategy from taking off, as government and agency personnel jumped ship and all new funds went to promote REDD activities. The authors claim that ‘the money ended up mainly benefiting the same conservation and development professionals, both Tanzanian and foreign, who had been pushing PFM before.’ REDD project implementers absorbed a large part of the new funds to cover their own overhead costs. For example, the African Wildlife Foundation spent one-third (USD0.7m) of its USD 2.1 million project budget on personnel, staffing, and administration, while the Jane Goodall Institute used over half its USD 2.8 million budget on staffing and administration. Claims by the Norwegian Embassy and an external review that REDD projects were delivering spectacular results, including an x8 increase in maize yields in one project, were shown to be false. Though not all disasters, none of the nine pilot REDD projects managed to sell carbon on the VCM. REDD’s poor performance dampened enthusiasm and further funding was not immediately forthcoming, but the World Bank and UN-REDD now manage a number of projects. This version of events stands in sharp contrast to the ‘official’ version which is that REDD+ dovetailed nicely into ongoing donor-financed participatory forestry processes.⁵⁹ According to Development Today: ‘Norway’s International Climate and Forest Initiative looks increasingly like a distraction from the urgent need to cut greenhouse gas emissions from the burning of fossil fuels.’

Sources: Jens Friis Lund, Mathew Bukhi Mabele, and Susanne Koch, 2016. ‘Norway’s Tanzania REDD+ adventure. Another forestry experiment gone awry’, Development Today, 25

⁵⁶ Michal Nachmany 2018. ‘Climate change governance in Tanzania: challenges and opportunities’, Policy brief, London School of Economics and Grantham Research Institute on Climate Change and the Environment. <https://www.lse.ac.uk/granthaminstitute/publication/climate-change-governance-in-tanzania-challenges-and-opportunities/>

⁵⁷ Nachmany, *op. cit.*

⁵⁸ Hanne Svarstad and Tor Benjaminsen

⁵⁹ According to UN-REDD: ‘In Tanzania, where donors are already investing in the forest sector, the cooperation of the national REDD+ process with those existing investments is laying a solid foundation for how funding streams will continue to flow through subsequent phases.’ UN-REDD Programme Secretariat. <https://www.un-redd.org/sites/default/files/2021-10/UN-REDD%20Africa%20Lessons%20Learned.pdf>

November; UN-REDD Programme Secretariat. See: <https://www.un-redd.org/sites/default/files/2021-10/UN-REDD%20Africa%20Lessons%20Learned.pdf>

Other critics claimed that the Tanzanian REDD+ model is notable for ‘the absence of clearly articulated relationships with existing statutory oversight institutions, such as Parliament and the Controller and Auditor General’.⁶⁰ How transparent and accountable are (self-regulated) carbon credit projects likely to be?

For many years systemic corruption has been flagged in government ministries, including the Ministry of Natural Resources and Tourism, and executive agencies, often in collaboration with private local and foreign companies.⁶¹ According to Transparency International (2011):

‘... reports of missing Norwegian bilateral funds granted to Tanzania provide just a hint at the potential for corruption should a massive influx of REDD+ cash occur.’⁶²

In general, donors are understandably keen to avoid talk of the misuse of their project funds, and on occasion deny the evidence that it has taken place. Most internal reviews and evaluations avoid ‘sensitive’ issues, corruption in particular.⁶³

1.3 The private sector threatens to take over Tanzania’s carbon marketing

As a result of incentives delivered at COP27 and other factors, the Tanzanian government has come to see its forests as a marketable resource, and a new source of tax revenue.⁶⁴ The country introduced its first legislation on carbon trading in 2022 with the Environmental Management (Control and Management of Carbon Trading) Regulations.⁶⁵ The Regulations proposed to tax projects at 18 percent of their revenues.⁶⁶

Box 4 describes the present state of official thinking on carbon trading.

⁶⁰ The 2006 State of the Environment report acknowledged that ‘the central-local relationships are still unclear’; and the lack of clarity in the relationship between the Department of the Environment in the Vice President’s Office and the National Environmental Management Council ... created a situation of ‘institutional gridlock.’ See:

⁶¹ In 2007, nearly 80 containers of unprocessed hardwood *en route* for China were impounded in Dar es Salaam port. A report by TRAFFIC – ‘Forestry, Governance and National Development: Lessons learned from a logging boom in southern Tanzania’ – had documented the level of illegal logging and revenue losses following the construction of the Mkapa Bridge across the Rufiji. See: Oneiti Andondile 2008. ‘Graft said central in logs harvesting’. Citizen, 7 August. The report found that 16 out of 28 logging companies ‘were directly linked to senior government functionaries.’ Also involved were army officers, MPs, RCs, DCs and police. Tom Mosoba 2007. ‘Ministers linked to Sh73b timber scam’, 26 May.

⁶² See: Transparency International 2011. ‘Global Corruption Report: Climate Change’, Earthscan. See: https://images.transparencycdn.org/images/2011_GCRclimatechange_EN.pdf, and UN Climate Action 2022. ‘Cop 27: Delivering for people and the planet’, 21 November.

⁶³ Donor attempts to sanction Tanzania over grand corruption during previous regimes have seriously upset relations between the two sides. Details on request.

⁶⁴ An insider view is that the values put on projects by government are far in excess of any reasonable

⁶⁵ The regulations apply to all types of carbon trading. See: Government Notice Number 636.

⁶⁶ In 2023, Zimbabwe sent shock waves through the VCM by declaring a 50 percent tax on carbon projects. Even 20 percent is bad news to investors, and intended beneficiaries.

Box 4: Carbon trading comes of age in Tanzania

On 14 July 2023, **Dr Selemani Jafo**, minister in the Vice-President's Office (Union and Environment), told a High-Level Inter-Ministerial Dialogue on Carbon Trading that Tanzania 'is looking forward to carbon trading as a source of ... revenue, targeting to earn over 2tri/- annually when planned carbon projects come on stream.' The deputy minister for Tourism and Natural Resources, **Ms Mary Masanja**: 'said Tanzania has a total of 48 million hectares of reserved forests, which is an opportunity for the carbon trade', adding that companies from Kenya, Russia, Singapore, USA, Canada, United Arab Emirates (UAE), Switzerland, Estonia, Italy and elsewhere had sent carbon trading applications to the Tanzania Forest Services Agency (TFS), Tanzania Wildlife Management Authority (TAWA), Tanzania National Parks Authority (TANAPA) and Ngorongoro Conservation Area Authority (NCAA). "With the introduction of the carbon trade regulations, we are optimistic that citizens will stop cutting down trees, and instead capitalise on the available potential" she is quoted as saying.

Source: Bernard Lugongo 2023. 'TZ eyes over 2tri/- from carbon trading annually.' Daily News, 15 July.

In February 2023 the Tanzania Forest Services (TFS) signed an MOU with Dubai's Blue Carbon 'to promote sustainable forest management practices and reduce carbon emissions' over an area of eight million hectares (80,000 square kilometers), including mangrove forests.⁶⁷

In May, GreenCop Development Ltd signed an MOU with the Tanzania Wildlife Management Authority (TWMA).⁶⁸ Owned by Belgian lawyer Jean-Jacques Coppée,⁶⁹ GreenCop 'aimed at creating Tanzania's largest carbon offset project through conservation and restoration of the Selous, Msanjesi and Kilombero Game Reserve ecosystems.' The three reserves cover 57,400 square kilometres.⁷⁰

Both MoUs raise many questions concerning the integrity, accountability, likely benefits/beneficiaries, certification procedures and coordination of the main actors involved.⁷¹ One obvious issue is how the proposed activities will threaten hundreds of ongoing forestry protection, agro-pastoral, conservation and 'green' tourism projects in areas

⁶⁷ Reporter 2023. 'Preserving 8m ha forest land key in Tanzania, Dubai carbon cut accord', Guardian, Blue Carbon website.

⁶⁸ Reporter 2023. 'TAWA, GreenCop signs deal to develop largest carbon offset project in three game reserves', Guardian, May 20. GreenCop doesn't yet boast a website to promote its achievements to date.

⁶⁹ The company was registered in Singapore on April 5 2023 and signed the MOU with TWMA less than six weeks later. Brussels Times 2020. M Coppée is a colourful Belgian lawyer See: 'Identity of man who 'threatened' Belgium's Prince is revealed', 6 February. Coppée was that man.

<https://www.brusselstimes.com/news/belgium-all-news/93797/identity-of-man-who-threatened-prince-laurent-is-revealed>

⁷⁰ At 50,000 square kilometers, the Selous is by far the largest of the three reserves. See:

<https://www.bing.com/search?q=Selous+Game+Reserve&cvid=fd444285422f4f62807ff89dd0044104&ags=edg e..69i57j46j0i3j46j0i3.7263j0i9&FORM=ANAB01&PC=HCTS>

⁷¹ Before the creation of these two executive agencies, the Wildlife and Forestry Divisions in the Ministry of Natural Resources and Tourism were bywords for corruption. Reporter 2007. 'Government under pressure over wildlife, forestry scandals', Thisday, 26 June.

that Blue Carbon plans to 'protect'.⁷² State bodies are already responsible for assuring the protection of game parks, game protected areas and forests, including mangroves, and maritime resources.

Tanzania has set up a National Carbon Monitoring Centre to assess and authorise all proposed carbon credit-based projects. An informed view is that the body lacks the technical skills and personnel required to assess projects, resulting in the accumulation of a backlog of pending projects and, as in the two proposals described above, an inability to challenge fundamental flaws in the proposals.⁷³

Though the climate crisis looms ever larger in public discourse, the GOT has yet to mainstream climate concerns among its revealed priorities.⁷⁴ Most spending on climate-related projects of all kinds is donor-funded. Energy and climate policies are not coordinated, so that the country's 'green' commitments are contradicted by proposed investments in, for example, coal-fueled power plants,⁷⁵ and the infamous EACOP.⁷⁶

1.4 The role of donors in promoting carbon credits

Multilateral and bilateral donors have been heavily involved in promoting carbon markets as integral to their global warming strategies.

Five major funds -- the Adaptation Fund, Climate Investment Funds, Global Environment Facility, Green Climate Fund, and the Central African Forest Initiative -- have over USD40 billion in pledged commitments.⁷⁷ Since its creation in 1992, the Global Environment Facility (GEF) has provided close to USD20.5 billion in grants...'.⁷⁸

In late 2023, the World Bank, the African Development Bank, the African Union Commission (AUC), and the United Nations Economic Commission for Africa (ECA)

⁷² A private forest protection project employee told me that the amount of carbon that game reserves can capture is negligible. In addition, a proposed project has to be able to demonstrate that *deforestation would take place in the absence of the project*. Game parks are protected against encroachment under existing arrangements. CC, personal communication, 2023.

⁷³ It is, of course, possible that projects with strong political support can bypass the vetting process with impunity.

⁷⁴ Climate Change is the responsibility of a small unit in the Vice President's Office, Department of the Environment.

⁷⁵ These are old Chinese promises that are unlikely to be realized. However, improved roads in the South West of the country have led Tanzanians to invest in coal mining, which has become a USD200m+ export industry. See: CSL 2023. 'TCSM2022', June.

⁷⁶ EACOP's carbon footprint, social and environmental consequences are discussed in: Centre for Strategic Litigation 2021a. 'The East Africa Crude Oil Pipeline: Risk analysis from a Tanzanian perspective', August, and Centre for Strategic Litigation 2021b. 'What you need to know about EACOP', Policy Brief, September. Total Energies is promoting this almost universally condemned oil pipeline project over renewable energy alternatives, including thermal power, that it could finance in the two countries.

⁷⁷ Transparency International 'CORRUPTION-FREE CLIMATE FINANCE: Strengthening multilateral funds', 2022

⁷⁸ '... and mobilised an additional USD112 billion in co-financing for more than 4,800 projects in 170 countries.' See: [Global Environment Facility \(GEF\) | UNEP - UN Environment Programme](#)

joined forces to establish the Africa Climate Resilient Investment Facility (AFRI-RES), funded by the Nordic Development Fund (NDF).⁷⁹

How do these organisations deal with carbon credit investments now that the VCM has virtually collapsed?

In Tanzania, donor agencies⁸⁰ have traditionally financed a large number of forest conservation projects through various state and non-state implementing organisations. For example:

- The Tanzania Forestry Services are currently (2013) implementing three donor-financed projects worth a total of TShs63 bn.⁸¹
- The Jane Goodall Institute received a grant of US\$30million for 'habitat restoration and protection' in western Tanzania from USAID.⁸²
- Five 'green' energy NGOs receive over TShs26bn in grants from the EU.⁸³
- Since 2011, the Tanzania Forest Fund, under the Ministry of Natural Resources and Tourism, has been awarding grants to eligible CBOs, NGOs, CSOs, FBOs, research organisations, government departments and private companies and other organisations for forest 'protection, conservation, management and development'.⁸⁴

If the VCM becomes a big player in Tanzanian forests, there are likely to be many conflicts over who controls which specific turf, given the plethora of ongoing projects in all nature-based sectors, with or without a direct 'climate' orientation.

REDD has not lived up to expectations and, in Tanzania, it gave impetus to a recentralisation of forest control, essentially terminating the policy of community-based forestry management. The central government does not consider local communities as the custodians let alone as the 'owners' of forests or as partners in forest protection,

⁷⁹ Duncan Miriri 2023. 'Hundreds of millions of dollars pledged for African carbon credits at climate summit', Reuters, 6 September.

⁸⁰ The Nordic countries, Norway in particular, have championed NRM in Tanzania, including REDD and REDD+.

⁸¹ These are: 'Integrated Landscape Management in the Dry Miombo Woodlands of Tanzania (DSL-IP) (US\$6.9m)'; 'Building the resilience of forest biodiversity to the threats of climate change in Tanzania's nature forest reserves' (US\$4.8m); and 'Integrated Approach to Sustainable Cooking Solution.' (sic). Professor Silayo said that during the past fiscal year TFS had produced 26 tons of tree seeds and planted no less than 32,735,653 seedlings across the country. Like many state claims, including others in the cited article, this one would be difficult, if not impossible, to verify. Valentine Oforo 2023. See: 'TFS allots 62.6bn/- to scale up forests' conservation'. Guardian, 18 August.

⁸² 'USAID and Jane Goodall Institute Tanzania join forces with \$29.5million', See: https://www.bing.com/search?q=JGI+gets+30m+in+Tanzania&cvid=8a7f60f0048043c5836b6e7e3cf3a4d0&gs_lcrp=EgZiaHJvbWUyBggAEEUYOTIGCAEQABhA0gEIOTY5OGowajmoAgCwAgA&FORM=ANAB01&PC=HCTS

⁸³ Under the Integrated Approach to Sustainable Cooking Solutions Programme the five grantees are: WWF, World Vision, HELVETAS Swiss Intercooperation, and TaTedo. Reporter 2023. 'EU, Tanzania lend a hand to sustainable cooking solutions, Guardian 18 November.

⁸⁴ Ministry of Natural Resources and Tourism 2024. '2024 call of proposals requesting grants', Guardian, 2 January.

but as one of the major drivers of deforestation. Farmers and pastoralists can be evicted from their land in the interest of conservation, tourism and hunting.⁸⁵

Villagers do indeed clear land to plant crops, thus contributing to deforestation.⁸⁶ But vast areas of forest are also felled for charcoal production for the rapidly growing urban population.⁸⁷ In addition, the logging industry (legal and illegal)⁸⁸ and expanding commercial agriculture also cause deforestation. All Tanzania's forest protection initiatives, including REDD, are insignificant compared to the combined drivers of deforestation. According to the FAO, Tanzania's forest cover fell from 56,837,000 hectares in 1990 to 45,192,000 in 2020, a loss of 264,000 hectares a year.⁸⁹ Tanzania ranked fifth in terms of global forest loss between 2010 and 2020, after Brazil, DRC, Indonesia and Angola.⁹⁰

While REDD has been largely aid-financed, the VCM seeks to mobilise private money in efforts to save tropical forests and biodiversity. It is quite unclear, however, how pressures to further commercialise tropical forest protection relate to the recent dramatic slump in the VCMs, reviewed below. Are these actors not supposed to be pushing in the same direction? The extreme complexity and opacity of carbon markets impede clear understanding and analysis.

⁸⁵ The Omani Royal Family has a private hunting concession in Loliondo, leased under President Ali Hassan Mwinyi in 1992. Recently, many Maasai and their cattle have been forcibly evicted from an adjoining area of Loliondo to create a new game park. Stephanie McCrummen 2024. 'The Great Serengeti Land Grab', The Atlantic, 8 April. See:

https://www.theatlantic.com/magazine/archive/2024/05/maasai-tribe-tanzania-forced-land-evictions-serengeti/677835/?utm_source=newsletter&utm_medium=email&utm_campaign=the-atlantic-am&utm_term=The%20Atlantic%20AM

⁸⁶ Some herdsmen overgraze (sheep and goats are worse than cattle).

⁸⁷ According to one estimate, a million tons of charcoal a year are produced at the cost of 100,000 ha of forest lost. See: Adam Branch, Jon Phillips and Frank Kwaku Agyei 2023. 'CHARCOAL POLITICS IN AFRICA: VALUE CHAINS, RESOURCE COMPLEXES, AND ENERGYPOLITICS', Progress in Physical Geography Earth and Environment, March.

⁸⁸ Illegal logging between the DRC, Uganda, Kenya and abroad is under the control of military and 'rebel' leaders and private businesses. For an exposé see:

<https://mail.google.com/mail/u/1/#inbox/FMfcgzGxSbtFclgDZzjBqkLsZTLlIGCS>. A Tanzanian example is cited above. Yet the DRC is one of the biggest recipients of REDD+ funds in SSA (see page six above).

⁸⁹ FAO 2020. 'Global Forest Resources Assessment 2020', Geneva, See:

<https://www.sprep.org/sites/default/files/documents/publications/forest-resources-assessment-main-report.pdf>

⁹⁰ Between 2010 and 2020, the loss was 420,000 hectares per annum. FAO op. cit., TABLE 7. Top ten countries for average annual net loss of forest area, 2010–2020, page 18.

2.0 The future of Voluntary Carbon Markets

‘With the carbon credit system, you can help save the environment, and make some money.’⁹¹

VCMs create Voluntary Carbon Credits⁹² (VCC). ‘VCCs can be purchased directly from suppliers in ‘registries’ such as Verra,⁹³ the American Carbon Registry, Gold Standard, and Climate Action Reserve. Alternatively, VCC’s can be purchased through brokers or [stock] exchanges.’⁹⁴ VCC buyers include corporations, airlines, and governments with emissions-reduction goals.’⁹⁵ The VCM is only a small part of the global ‘emission trading system’ (ETS), which Bloomberg estimated to be worth USD60billion in 2023.⁹⁶

The VCM has gone from relative boom to bust in the last few years. ‘In 2021, the voluntary carbon market grew at a record pace, reaching \$2 billion—four times its value in 2020—and the pace of purchases is still accelerating in 2022.’⁹⁷ According to the World Bank: ‘... carbon markets have become increasingly fundamental to achieving the Net-Zero greenhouse-gas emissions target.’ ‘The demand for voluntary carbon credits (VCC’s) is set to rise by a factor of 15 by 2030.’⁹⁸



⁹¹ How to Make Money Carbon Credits | Sapling

⁹² One credit = one ton of CO₂. One ton of CO₂ fills a balloon of about 10 metres in diameter.

⁹³ Carbon credit projects based on Verra’s Verified Carbon Standard (VCS) are the most numerous in the VCM, accounting for over 1.2 billion verified carbon units.

⁹⁴ Brokers can bundle carbon credits into derivatives that, ‘even more than the credits themselves, are vulnerable to fraud and manipulation.’ See: [is a carbon credit a derivative? - Search \(bing.com\)](#)

⁹⁵ Jennifer 2020. *op. cit.*

⁹⁶ The ETS seems to exclude traded ‘sustainability-linked bonds’ (SLB) which are said to be worth roughly USD280 billion and can, according to Climate Bonds Initiative (CBI) Chief Executive Officer Sean Kidney, “play an enormous part in transitioning the world economy to a greener future.” The mostly US-based SLB market is accessible to heavy polluters like cement producers or steel manufacturers, but there’s said to be a “high proportion of low-quality deals that lack adequate disclosure, ambition and credibility.” See: Natasha White 2024. ‘A bond market that isn’t working as planned’, Bloomberg, ESG Investing, 26 March. <https://www.bloomberg.com/news/articles/2024-03-26/the-280-billion-climate-bond-market-that-isn-t-working>. A predecessor of the SLB was the Chicago Carbon Exchange (CCX), established in 2003. ‘In 2010, the CCX was discontinued following a sustained period in which the carbon price traded at 5 cents and the exchange witnessed essentially zero activity.’ See: CSIS 2023. ‘Voluntary Carbon Markets: A Review of Global Initiatives and Evolving Models’, 31 May (csis.org).

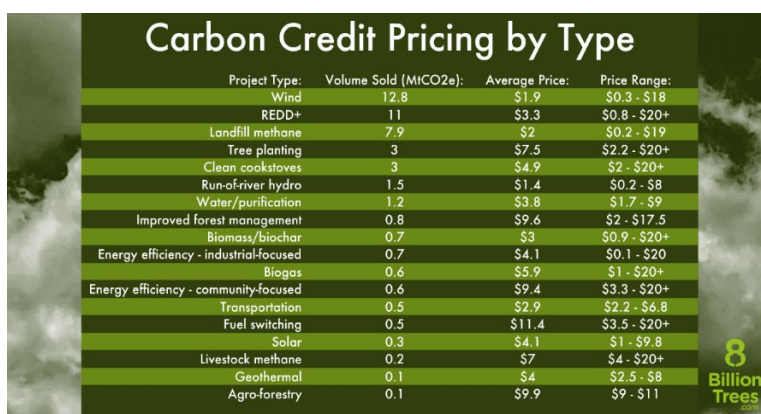
⁹⁷ Anders Porsborg-Smith, Jesper Nielsen, Bayo Owolabi, and Carl Clayton 2023. ‘The Voluntary Carbon Market Is Thriving’, Energy Transition, 19 January. <https://www.bcg.com/publications/2023/why-the-voluntary-carbon-market-is-thriving>

⁹⁸ *Op. cit.*

But, despite the hype, the price peaked at about USD15 a ton in June 2022 and then fell to *one dollar or less* a year later (see graph).⁹⁹ The markets were responding to growing evidence that carbon credit projects were not delivering, and, after years of environmental campaigning, the official rejection of carbon offset projects *tout court*.¹⁰⁰ In a September 2022 report, the UN High-level Expert Group on Net-Zero Commitments of Non-state Actors called for:

‘... zero tolerance for net-zero greenwashing’; warned polluting companies against buying ‘cheap, low-integrity credits’ from poor countries instead of making immediate emissions cuts; and asked the voluntary carbon market ‘to respect human rights’¹⁰¹ and consult (sic) affected Indigenous and local communities “responsible for the stewardship of...ecosystems used for offsetting projects”.¹⁰²

The Table opposite lists different carbon credit prices on the VCM on March 15, 2024,¹⁰³ when carbon credits were trading at between US\$1.4 (run-of-river hydro) and US\$9.9 per ton of CO₂ (Agro-forestry).¹⁰⁴ Nature Based Offsets traded at 90 US cents, Tech Based Offsets at



Project Type:	Volume Sold (MtCO ₂ e):	Average Price:	Price Range:
Wind	12.8	\$1.9	\$0.3 - \$18
REDD+	11	\$3.3	\$0.8 - \$20+
Landfill methane	7.9	\$2	\$0.2 - \$19
Tree planting	3	\$7.5	\$2.2 - \$20+
Clean cookstoves	3	\$4.9	\$2 - \$20+
Run-of-river hydro	1.5	\$1.4	\$0.2 - \$8
Water/purification	1.2	\$3.8	\$1.7 - \$9
Improved forest management	0.8	\$9.6	\$2 - \$17.5
Biomass/biochar	0.7	\$3	\$0.9 - \$20+
Energy efficiency - industrial-focused	0.7	\$4.1	\$0.1 - \$20
Biogas	0.6	\$5.9	\$1 - \$20+
Energy efficiency - community-focused	0.6	\$9.4	\$3.3 - \$20+
Transportation	0.5	\$2.9	\$2.2 - \$6.8
Fuel switching	0.5	\$11.4	\$3.5 - \$20+
Solar	0.3	\$4.1	\$1 - \$9.8
Livestock methane	0.2	\$7	\$4 - \$20+
Geothermal	0.1	\$4	\$2.5 - \$8
Agro-forestry	0.1	\$9.9	\$9 - \$11

65 cents, and the Aviation Industry Offsets at 49 cents. Companies verifying carbon projects also saw their shared plummet. Verra, one of the largest, traded at 99 cents a credit in March, down from over US\$20 at the beginning of the year.¹⁰⁵

2.1 Commentary

Research documenting the failure of almost all VCMs to capture significant amounts of carbon and reports of human rights abuses have helped precipitate the collapse of VCMs in the last two years. The accusation of ‘greenwashing’ against oil and gas companies and other big emitters buying carbon credits also contributed to the

⁹⁹ See: <https://carboncredits.com/carbon-prices-and-voluntary-carbon-markets-faced-major-declines-in-2023-whats-next-for-2024/>

¹⁰⁰ I expect COVID didn’t help.

¹⁰¹ According to Carbon Brief: ‘Scores of investigations have uncovered evidence of carbon offset projects forcing local people from their homes and farmland.’ See: <https://interactive.carbonbrief.org/carbon-offsets-2023/infographic.html>

¹⁰² Aruna Chandrasekhar 2023. ‘Timeline: The 60-year history of carbon offsets’, Carbon Brief, 25 September. See: <https://interactive.carbonbrief.org/carbon-offsets-2023/timeline.html>

¹⁰³ See: <https://carboncredits.com/carbon-prices-today/>

¹⁰⁴ See: <https://8billiontrees.com/carbon-offsets-credits/new-buyers-market-guide/carbon-credit-pricing/>

¹⁰⁵ See: <https://carboncredits.com/carbon-prices-today/>

collapse. A third factor recently flagged by lawyers is the risk of companies being prosecuted for lying to shareholders over their claims to 'carbon neutrality'.¹⁰⁶

Economists have been developing the concept of carbon markets for at least 60 years. In the 27 years since the Kyoto Protocol (1997), the creation and management of global carbon markets have been entrusted to a number of existing international organisations -- including the UN, World Bank, UNDP, UNEP, IFAD, the FAO -- and a proliferation of new organisations created under the COP/IFCC/UNFCCC processes, including UN-REDD, the Forest Carbon Partnership Facility (FCPF), and the Green Carbon Fund (GCF).

From the Kyoto Protocol via the Paris Agreement¹⁰⁷ to date, the commodification of greenhouse gases has stimulated the growth of an impressive climate industry. The Clean Development Mechanism (CDM) led to the expansion of policy and regulatory bodies across the globe, while the (much smaller) Voluntary Carbon Market (VCM) has created a swath of new private actors, including profit and non-profit project implementers, verifying agencies, asset traders, banks, and many others. Both compliance and voluntary markets have stimulated global higher education, and the research and consultancy services industries.¹⁰⁸

All these organisations represent a large and growing set of interests vested in the continuation of global carbon markets. The recent collapse of VCMs threatens profits, careers, jobs, and salaries in most of these interest groups.¹⁰⁹ How are they reacting?

Commenting on similar trends over a decade ago, Steffen Böhm observed:¹¹⁰

"... carbon markets have created a lot of income for consultants, carbon brokers and project developers, not to mention the validators, policy makers, NGO professionals and academics who have made a living from these markets. There is very little independent and democratic oversight in the system. Instead, there are many revolving doors

¹⁰⁶ In May 2023, Delta was sued in federal court over its claim to be 'the world's first carbon-neutral airline.' Large companies' Environmental, Social, and Governance (ESG) carbon reduction promises are being increasingly monitored by public interest litigators in the US and elsewhere. Globally, between 2015 and 2022, over 80 'greenwashing' cases were filed against companies. See: Allegra Dawes 2024. 'What's plaguing voluntary carbon markets?' CSIS, February 2, see: <https://www.csis.org/analysis/whats-plaguing-voluntary-carbon-markets>

¹⁰⁷ The Paris Agreement had important implications for the carbon trade that I do not have time to deal with. Romm claims that: 'authorized offsets would allow developed countries to make achieving their Paris climate commitments easier [by buying up cheap African credits] while shifting the burden to the developing countries who must make achieving commitments harder, because they cannot 'charge' the emission reductions against their NDCs. Romm *op. cit.*

¹⁰⁸ In 2017, there were at least 38 carbon pricing 'instruments' worldwide. See: <https://www.ucsusa.org/resources/carbon-pricing-101>

¹⁰⁹ For example, during the good times, 'South Pole, a major carbon broker, launched a major expansion, growing to twelve hundred employees and twenty-nine international offices.' See: <https://www.southpole.com/>.

¹¹⁰ See: Steffen Böhm 2013. 'Why are carbon markets failing?' The Guardian, 12 April. See: <https://www.theguardian.com/sustainable-business/blog/why-are-carbon-markets-failing>

between the business, policy, NGO and university worlds, fuelling accusations of corruption.

In addition to the chronic problem of 'additionality', Böhm flags widespread corruption and 'non-transparency' as reasons for project failure. Describing the EU Emissions Trading System (EU-ETS) and the UN's carbon offsetting scheme, Clean Development Mechanism (CDM) as 'failures', it was surprising that 'new carbon markets based on these schemes are being planned in both developed and developing nations.'¹¹¹

These trends were emerging just as carbon markets collapsed. The present combination of market collapse and frantic market promotion seems like recent history repeating itself.

Until recently, the main discourse around climate finance concerned 'reparations' due to the South from the North, including payments for 'risk and damage' resulting from climate change.¹¹² The focus has moved from public to private capital as the main vehicle for addressing climate change mitigation efforts. The emergence of the UAE as a major player in African carbon markets also coincides with the current VCM collapse.

Carbon credits and (particularly) offsets have been (at least for the moment) discredited. Carbon markets are clearly not a 'major solution' to deforestation and loss of biodiversity. The forest area saved through climate credits can only be a small fraction of forests (and biodiversity) lost through deforestation.¹¹³

¹¹¹ At the time, 'more than 100 civil society organisations are currently calling for the EU-ETS to be scrapped.'

¹¹² Richard H. Clarke, Noah J. Wescombe, Saleemul Huq, Mizan Khan, Bert Kramer & Domenico Lombardi 2023. 'Climate loss-and-damage funding: a mechanism to make it work' Nature Comment, November. See: <https://www.nature.com/articles/d41586-023-03578-2>

¹¹³ According to the World Resources Institute, the world lost 9.1 million acres of primary tropical forest in 2023, an area almost the size of Switzerland. Manuela Andrioni 2024. 'Global Forest Loss Remains High, Despite Recent Progress', New York Times, 4 April. See: <https://www.nytimes.com/2024/04/04/climate/global-forest-tree-loss-wri.html>. Brazil's net forest loss last year was 2.8m ha, driven by logging, ranching and agriculture. Global warming threatens forests and biodiversity through pests and the rising incidence of forest fires.

3.0 Recommendations: tracking the intractable

‘Every major offset program still has the same problems researchers and investigative reports have been identifying for more than two decades. That suggests the core problems are inherent ... and intractable.’¹¹⁴

The notion that rent-seeking in carbon markets can be policed and sanctioned by supranational governance institutions denotes *extreme hubris*. This paper suggests that the carbon markets that have evolved over the last quarter of a century cannot be patrolled and disciplined for corrupt practices when the institutions governing carbon pricing are so diverse, complex, bureaucratic, gameable, uncoordinated, and full of ‘moral hazards’.

A rapid rise in carbon market investments in SSA will arguably expose a widespread lack of technical capabilities and policy direction, and present endless rent-seeking opportunities to the key players on all sides. It would be wrong, however, to single out African regimes as the weakest link in the chain between international finance and the communities deemed to be protecting the forests. None of the component parts of the carbon industry - including international agencies, project developers, auditors, registries, consultants and suppliers – should be beyond the purview of governance watchdogs. The literature summarised in this paper strongly suggests that the global architecture governing public and private carbon markets, including the CDM, is poorly regulated and almost totally lacking in democratic oversight.¹¹⁵ The UN and most of its agencies have weak integrity systems, as do the governments and state corporations with whom carbon projects will be negotiated.

3.1 The World Bank¹¹⁶

‘Our vision is to create a world free of poverty on a liveable planet.’¹¹⁷

The World Bank is among the most committed promoters of carbon markets, including in Africa. The Kyoto Protocol (1997) saw the launch of the Clean Development

¹¹⁴ Joseph Romm 2023. ‘Are carbon offsets unscalable, unjust, and unfixable—and a threat to the Paris Climate Agreement?’ A White Paper from the Penn Center for Science, Sustainability, and the Media., p.41.

¹¹⁵ The SEI study criticises the CDM’s integrity system, but previous criticisms have not triggered any significant internal reforms. Stockholm Environment Institute 2011, *op. cit.* On CDM ‘governance’ SEI flagged: ‘Lack of transparent and consistent decisions; Ineffective communications; Executive Board conflicts of interest; Inefficiency in the EB decision making regarding project registration and ... certified emissions reductions (CERs); Lack of transparency and consistency in the EB and the DNA decision making; Inadequate due process, including lack of appeal procedures for stakeholders and project participants; Lack of standards for materiality (?); Unsatisfactory performance of DOEs (?) in their role as validators and verifiers; Failure to control the negative impacts of some CDM projects on human rights and other harmful issues.’

¹¹⁶ The World Bank’s Integrity Vice Presidency is quite unique in monitoring Bank-financed projects for integrity shortcoming, and for sometimes sacking and prosecuting errant staff members. Some projects inevitably fall through the cracks, however. If any participants are interested in learning more, please contact me.

¹¹⁷ See: <https://www.worldbank.org/en/who-we-are>.

Mechanism (CDM) and the rapid expansion of the ‘compliance’ carbon market. The VCM developed more modestly since it was, at least in part, ‘market-driven’.

The World Bank runs three carbon-related Trust Funds.¹¹⁸ WB-managed Trust Funds are thought to be more vulnerable to rent-seeking than WB-run projects in general. The Biocarbon Fund’s Initiative for Sustainable Landscapes is designed ‘to invest in agriculture and forestry projects that absorb and sequester greenhouse gases.’ ‘The Fund is a public-private sector initiative managed by the World Bank and supports projects that generate multiple revenue streams, combining financial returns from the sale of ... carbon credits ... with increased local incomes and other indirect benefits from sustainable land management practices.’¹¹⁹

In December 2023, the WB announces:

‘... ambitious plans for the growth of *high-integrity global carbon markets*, with 15 countries set to earn income from the sale of carbon credits generated from preserving their forests.’ By 2024 ‘these countries will have produced over 24 million credits, and as many as 126 million by 2028. These credits could earn up to \$2.5 billion in the right market conditions, with much of that going back to communities and countries.’¹²⁰

The Bank’s Integrity Vice-Presidency (IVP) investigates complaints against staff and contractors in IDA-financed projects.¹²¹ I have no idea whether the IVP is adequately resourced to deal with the corruption complaints it receives. Complaints concerning Carbon Finance Operations are investigated by the Chief Suspension and Debarment Office (SDO), which also reviews cases involving IFC, MIGA, and IBRD/IDA Guarantees.¹²²

No doubt this symposium will learn more about the IVP’s and SDO operations and ambitions going forward.

The Bank should justify its further support for carbon markets in light of the utterly damning research and investigative journalism that has helped bring about the latest

¹¹⁸ Namely, THE CLIMATE SUPPORT FACILITY (CSF), THE PARTNERSHIP FOR MARKET IMPLEMENTATION FACILITY (PMIF) and SCALING CLIMATE ACTION BY LOWERING EMISSIONS (SCALE), see:

<https://thedocs.worldbank.org/en/doc/c3f6d19a03ae74b86d311a8dc8dd26a2-0020072022/original/SCALE-2-Page-Final-Oct22.pdf>. Senior staff in WB-managed Trust Funds have been sacked, prosecuted and jailed. The Bank’s compliance staff may have more on this.

¹¹⁹ See: ISFL - BioCarbon Fund, biocarbonfund-isfl.org

¹²⁰ The countries, which are all part of the World Bank’s Forest Carbon Partnership Facility, are: Chile, Costa Rica, Cote d’Ivoire, Democratic Republic of Congo, Dominican Republic, Fiji, Ghana, Guatemala, Indonesia, Lao PDR, Madagascar, Mozambique, Nepal, Republic of Congo, and Viet Nam. See: [World Bank Carbon Credits to Boost International Carbon Markets](#). Emphasis added.

¹²¹ But generally not government officials in recipient countries.

¹²² In FY23, the IVP opened 27 new cases and closed 17. Of these, seven were substantiated and ten were not. In the same year the SDO temporarily suspended 19 ‘respondents’ (11 firms and 8 individuals). The SDO. See: <https://documents1.worldbank.org/curated/en/099092923070015199/pdf/BOSIB094efb0ea09a093ae053b0969c7d7e.pdf>

collapse in investor confidence. The WB should explain how forest protection and other conservation measures¹²³ help reduce poverty, not in theory but in practice.

In addition, if the WB and other development agencies want to address deforestation, they should engage with national governments and the private sector in controlling illegal logging, finding cost-effective alternatives to charcoal for urban cooking,¹²⁴ and discourage forest and land clearing to plant palm oil or sugar-cane.¹²⁵ Jane et al. (2014) found that large-scale (mostly foreign) land acquisitions in SSA totalling 22.7 million hectares of arable land 'are heavily geared towards oilseeds (60%), timber and pulpwood trees (15%) and sugar crops (13%).'¹²⁶

3.2 Anti-corruption agencies

Arguably, corruption in the VCM market is an integral component, albeit unintentional, of the carbon market concept. It is unfortunately likely that, if the market is gameable, it will be gamed. If there are rents to be sought, there will be seekers.

Strategically, TI and other governance monitors should include the global players in the carbon markets as suitable candidates for systematic surveillance. We know that corruption characterises politics and government in SSA, but how confident are we in the integrity of the international organisations involved in the administration of all those projects? The UN and its agencies have generally poor governance records and inadequate internal controls.¹²⁷

Concerned local TI chapters will have to decide on the degree to which they engage with or challenge the legitimacy of carbon trading.¹²⁸ It is suggested that TI local chapters

¹²³ As a result of accusations of human rights abuses associated with its US\$150m Resilient Natural Resource Management for Tourism and Growth (REGROW) conservation project in Tanzania, the WB suspended its support for the project pending a full investigation. 852 villagers surrounding Ruaha National Park filed a case at the High in Mbeya. See: The Oakland Institute. 2023. 'Unaccountable & Complicit', and The Chanzo, 30 April <https://thechanzo.com/2024/04/29/world-bank-and-regrow-project-in-tanzania-a-timeline-of-key-events/>

¹²⁴ In Zambia, for example, both rural and urban households rely heavily on charcoal as fuel for cooking and heating. Charcoal is the main cause of deforestation of about 300,000 ha a year, one of the highest rates in the world. See: [Copilot with GPT-4 \(bing.com\)](#).

¹²⁵ In an infamous recent case, Ugandan President Museveni authorised the clearing of swathes of the Bugoma Forest Reserve, Hoima, to be cleared for a sugarcane plantation. Samuel Okiror 2020. 'A shame for the world': Uganda's fragile forest ecosystem destroyed for sugar', Guardian UK, 20 June. See: <https://www.theguardian.com/global-development/2020/jun/18/a-shame-for-the-world-ugandas-fragile-forest-ecosystem-destroyed-for-sugar>

¹²⁶ These acquisitions reduce the land area available to smallholders and increase pressure to clear the forest frontier for subsistence purposes. See: T.S. Jayne, Jordan Chamberlin, Derek D. Headey 2014. 'Land pressures, the evolution of farming systems, and development strategies in Africa: A synthesis', Food Policy, 48.

¹²⁷ In the UN, the main focus has been on sexual corruption and cover-ups at HQ and in UN peacekeeping operations around the world. Martin Jay 2019. 'The UN, Corruption and Scandals: How Did We Get Here?', International Policy Digest, 29 July. See: <https://intpolicydigest.org/the-un-corruption-and-scandals-how-did-we-get-here/>.

¹²⁸ In 2011, TI-S coordinated a study of climate change governance structures in a number of countries. In Kenya: 'Successful governance reforms to address deep rooted corruption will ... be critical to the

should start to monitor markets and projects, flagging abuses, particularly concerning the interests of local communities.

The 'climate justice' movement – which addresses much more than just saving forests – is growing rapidly in response to the threat posed by the current wave of investments. Public Interest Litigation (PIL) is increasingly used internationally and in East Africa to challenge governments and private corporations. Across the African continent, civil society has now realised that climate justice is not just a case of the West compensating Africa for the ongoing devastation caused by climate change, but of defending the rural majority against efforts by governments and foreign interests to commercialise nature and enclose the remaining commons. This places climate activists on a collision course with their governments, the carbon investors and donor agencies. TI Chapters need to be clear on how they position themselves on carbon markets, given the growing centrality of global warming in their strategies.

The growing trend towards authoritarianism affecting many African countries will arguably make climate justice activism and investigative journalism more hazardous. Repeated claims of human rights abuses in REDD and other offset projects have led to widespread protests by climate activists, routinely met with state violence. One example among many: on December 15, 2023, eleven Ugandan students protesting against the EACOP were allegedly beaten and held for a month in a maximum-security prison.¹²⁹

The glaring contradiction between the continued promotion of African carbon credit markets by the development industry and the virtual collapse of many of these markets starting in mid-2022 needs to be addressed. At least it should be an item on the suggestions for post-symposium activities.

It is worth repeating that focusing on carbon markets in isolation misses the main point. The crucial issue is *not* the carbon market, or corruption in it, but the entire rationale for investing hugely in protecting tropical forests, when the main issues are population growth and expanding agriculture. Enormous state subsidies to the biggest greenhouse gas emitters flies in the face of concerns with 'green' energy. According to the WWF: 'Globally, at least 100 times more public funding goes to environmentally harmful subsidies than to finance forests.'¹³⁰ The policies of national governments and international organisations continue to favour economic growth over climate change concerns. According to the IMF:

'Globally, fossil fuel subsidies were \$7 trillion in 2022 or 7.1 percent of [Global] GDP. ... nearly 60 percent [\$4.2 trillion] is due to undercharging for global warming and local air

flow of future climate financing.' See: Gemma Norrington-Davies and Nigel Thornton 2011. 'Climate Change Financing and Aid Effectiveness: Kenya Case Study', Agulhas, March, p7.

¹²⁹ Nina Lakhani 2024. 'Ugandan climate activists face charges after a month in maximum security jail', UK Guardian, 6 February. See:

¹³⁰ WWF 2023. 'Forest pathways report', October. See: https://wwf.panda.org/wwf_news/?9899941/Forest-Pathways-Report-2023

pollution.’¹³¹ In addition, global subsidies to commercial agriculture are worth an estimated \$700 billion a year, ‘contributing to ... continued demand by businesses and consumers ... for deforestation-causing products.’¹³²

The conclusions from this symposium can serve as a basis for a root and branch review of carbon markets.

It is recommended that TI’s National Chapters, board, Secretariat and International Council collaborate in a comprehensive review to establish an *evidence-based* carbon market policy.

¹³¹ Simon Black; Antung A. Liu; Ian W.H. Parry; Nate Vernon 2023. ‘IMF Fossil Fuel Subsidies Data: 2023 Update’, IMF Working Paper, 24 August 24. <https://www.imf.org/en/Publications/WP/Issues/2023/08/22/IMF-Fossil-Fuel-Subsidies-Data-2023-Update-537281>

¹³² Emphasis added. See: https://redd.unfccc.int/uploads/2_244_reddplus_pathwaystobridgeprojectandjurisdictionalprograms.pdf