Engaging with Climate Smart Agriculture: Using debt relief and Multilateral Development Partnerships as Climate Finance Tools

Julye-Anne McKenny, Bradley Watts and Madelyn Stimac

Issue

Highly indebted poor countries (HIPCs) throughout Sub-Saharan Africa benefit from support in building climate-resilient communities through the use of nature-positive solutions. Based on Canada's agricultural expertise in capital and competencies, Canadian policy makers have an opportunity to develop climate-smart agriculture as a mitigative measure of environmental damage while also easing financial burdens on developing nations by employing a debt relief development model as a climate finance instrument.

Overview

Canada has doubled its initial monetary commitment at the 2015 Paris Climate Conference to aid developing nations in their transition towards low-carbon, climate-resilient economies. The Canadian government has placed greater emphasis, both domestically and internationally, on implementing nature-based climate solutions, such as climate-smart agriculture (CSA), as a means of adaptation. Even though Canada made a substantial commitment in 2015, monetary aid is not sufficient to effectively transition HIPCs towards CSA. Due to the debt crisis that many HIPCs are already facing, they are choosing to pay off debts rather than adapting to climate change. To alleviate this, debt relief should be used as a climate finance tool. This would both contribute to achieving the UN Sustainable Development Goals and strengthen Canada's relationships with developing nations via informed development and economic engagement. As well, it would be a reconciliatory step to righting Canada's position as a beneficiary of modern exploitative neo-colonial systems.

Climate Smart Agriculture

CSA is an integrated approach that addresses the interlinked challenges of food security and climate change (World Bank 2024). Already, the agricultural sector faces a multitude of climatic challenges that burden farmers, impacting global food supplies (ibid.). Specifically, the nutritional value of many crops has been reduced, and yields are lower than ever before (ibid). To mitigate these impacts, CSA includes a variety of practices, such as conservation agriculture, integrated crop-livestock management and cover cropping, as well as better nutrient and water management (Ogisi and Begho 2023). Substantial investments in climate adaptation will be required to maintain current yields and to achieve production and food quality increases (World Bank 2024).

CSA is an ideal area for investment because it helps farmers achieve a triple-win, whereby farmer productivity is improved, agriculture and food systems are made increasingly resilient and greenhouse gas emissions are reduced (ibid). The Ministry of Agriculture and Agri-Food Canada (2024) emphasizes the necessity of strengthening the resilience of the agriculture and agri-food sector while also capturing new market opportunities, driving economic growth and competitiveness, combatting climate change and remaining a reliable partner in global food security. Canada has taken steps towards advancing CSA domestically, and the nation's agricultural expertise can be used to assist developing countries abroad. The government has not only made monetary commitments but has also developed four agricultural policy frameworks and introduced the Canadian Agricultural Partnership (Government of Canada 2021). With these initiatives, the government aims to foster ongoing innovation, growth and environmental stewardship within the sector. Through the above programs, the government has pledged to work with farmers and other agri-food businesses within Canada in the transition to a low-carbon economy by supporting the adoption of cleaner practices and technologies (ibid). As of 2021, it has committed to investing CDN$165.7 million over seven years to support the agricultural industry in developing and adopting transformative clean technologies (ibid). This includes the Agricultural Clean Technology program, which develops on-farm clean technologies, such as precision agriculture and agri-based bioproducts, to reduce carbon footprints and resource waste (ibid).

Canada's reputation for humanitarianism and its policy focus on CSA supports national goals of international security and economic stability. Canada should utilize their agricultural expertise to assist HIPCs in implementing adaptive measures, achieving climate goals and stabilizing international food systems. HIPCs often experience the most severe climate effects, such as droughts, storms and heat waves, but are burdened by other short-term spending needs, such as debt servicing, and are unable to sufficiently respond to climate crises (Georgieva, Gaspar and Pazarbasioglu 2022). To expand Canada's humanitarian reputation and develop its soft power in Sub-Saharan Africa, Canada should assist nations looking to advance in these areas but lack the requisite resources.

Debt Relief and HIPCs

HIPCs throughout Sub-Saharan Africa struggle with debt burdens to both private and public lenders. Due to increasingly stringent criteria and conditions, HIPCs have turned more to private lenders who impose significantly higher interest rates and shorter repayment periods compared to bilateral or multilateral agreements (Kedir et al. 2023; Akolgo 2023). From 2000 to 2019, HIPCs' debt to private creditors surged, encompassing 40 percent of their total debts (Kedir et al. 2023). This rapid debt accumulation has fuelled socio-economic unrest, contributing to recent political instability across Africa (ibid.). As part of the Paris Club, a group of public lenders, Canada responded with debt relief programs in conjunction with the International Monetary Fund's (IMF's) Debt Relief Under the HIPC Initiative (Government of Canada 2019).

To participate in the initiative, HIPCs must meet certain criteria and policy commitments. The qualification criteria are having an unsustainable debt burden, eligibility to borrow from the World Bank's International Development Agency, a track record of policy reform based on other IMF or World Bank programs and the development of a "Poverty Reduction Strategy Paper" (IMF 2023). Once eligibility is determined by the executive boards of the IMF and World Bank, the international community commits to reducing debt to a level that is considered sustainable (ibid). Canada also has national multilateral debt forgiveness programs that function through the complete cancellation of debt (Government of Canada 2019).

Reducing HIPC debt is an important avenue for climate finance because 28 of 39 of the HIPCs are situated in Sub-Saharan Africa, a region which faces extreme climatic impacts (IMF 2023). The goal of the IMF's initiative was to ensure that no poor country faces an unmanageable debt burden (Hakura 2020). Unmanageable debt means it is unsustainable for the indebted nation, resulting in governments defaulting on loans and becoming unable to meet essential spending requirements, which can have severe economic and social consequences (ibid). More specifically, HIPCs struggle with issues of underdeveloped infrastructure and food security, making their agricultural sectors especially vulnerable to both economic and climatic shocks (Energy Capital & Power 2023).

Specifically, Sub-Saharan Africa is highly vulnerable to climate change. CSA is a crucial tool for addressing these issues. Furthermore, Sub-Saharan African HIPCs often face difficulties advancing their agricultural sectors due to a lack of national finances, adequate training and appropriate infrastructure or technology (Codjoe, Owusu and Burkett 2014). Debt relief as a climate finance tool could free up funding in HIPCs to be dedicated to CSA as a climate adaptation tool. Strengthening the agricultural sector and infrastructure in the face of climate disasters is a critical piece of development for all nations to ensure adequate food security and nutrition.

Canada has pre-existing commitments to assist countries in need of debt relief, and it is essential that said relief is delivered quickly and efficiently (Government of Canada 2019). HIPC countries such as Angola and Kenya, which currently hold outstanding debt to Canada, could benefit substantially from further debt relief and assistance in maintaining both financial and ecological stability in their agricultural sectors (ibid). Angola, for example, has emphasized their interest in increased financial assistance for funding CSA (Energy Capital & Power 2023). Already, the United States has implemented the "Partnership for Global Infrastructure and Investment" in Sub-Saharan Africa; the program is furthering the development of the agricultural sector in Angola (Office of the Spokesperson 2024). Thus, the success of this program suggests Canada could help to implement similar opportunities in HIPCs.

Strategic Commitments and Values-based Development

Canada's commitment to gender equity and the inclusion of historically marginalized stakeholders is vital to ensuring effective climate finance. Based on this goal, Canadian policy makers should identify regional development organizations familiar with the needs and priorities of local communities and provide the opportunity to establish equitable and participatory partnerships. A holistic and bottom-up approach that encompasses education, training, participatory governance and the democratization of resources avoids the often paternalistic nature of aid programs, which disregards the traditional knowledge of local populations.

Alinea is one such development agency dedicated to enhancing the productivity, assets and self-sufficiency of small-scale farmers, specializing in helping them adapt to and mitigate the impacts of climate change (Alinea 2024). The agency utilizes an integrated approach to tackle the challenges posed by climate change by establishing relationships with multiple levels of government and communities (ibid). For example, in Ethiopia, Alinea offers specialized support through management and technical expertise to develop a national protocol for CSA alongside the government's Ministry of Agriculture (ibid). Specifically, they are working towards integrating climate-smart initiatives into watershed and rangeland activities planning (ibid). This includes reviewing climate-smart social protection programs, utilizing modern technologies for enhanced monitoring and evaluation, and strengthening connections with climate and risk reporting and early warning systems (ibid). These partnerships promote development and reduce poverty, specifically in the agricultural sector, by marrying modern approaches with grassroots knowledge. For example, the African Union's Agenda 2063, "The Africa We Want," puts forth the goal of inclusive economic advancement in the agricultural realm, emphasizing the pivotal role of traditional wisdom from African communities (African Union Commission 2015). There is also explicit mention of modernizing agricultural practices for increased production and the creation of climate-resilient economies and communities, highlighting CSA as a potential solution (ibid).

Participatory values-based development reflects the need for a feminist approach to addressing climate change, as is outlined in Canada's Feminist International Assistance Policy (FIAP) (Government of Canada 2021a). Canada has a history of international commitment to uplifting women and girls, which should be reflected in our relationships with HIPCs (ibid.). Women play a primary role in agriculture in many HIPCs and bear the burden of care; for example, in Kenya, women are viewed as the custodians of traditional farming practices, meaning they are essential to agriculture (Gasparatos et al. 2020) Thus, reducing the barriers female farmers face in HIPCs is critical to increasing the adoption of CSA. The empowerment of women and girls creates the environment required for a sustainable transition due to their already irreplaceable value in current agricultural practices among HIPCs (Ogisi and Begho 2023). As Canada and numerous intergovernmental organizations have highlighted, agriculture makes up the majority of income for working women in developing nations, therefore CSA prioritizes women's empowerment (Government of Canada 2021b; Food and Agriculture Organization of the United Nations 2011; World Bank 2024).

Recommendations

Global Affairs Canada (GAC) should establish a debt-relief program for HIPCs that is focused on financing climate adaptation and CSA in HIPCs. Such a program would emphasize nature-based solutions to climate change mitigation and adaptation, which GAC has established as priorities. Additionally, the program could be modelled after the pre-established debt relief structures in Canada, such as the multilateral debt relief initiative discussed above, but modified to prioritize climate finance. A debt relief program centred around climate change adaptation through CSA would require a HIPC to have a planned framework to implement CSA and contribute to Canada's reparations as a historical emitter. CSA is critical to any debt relief program tied to climate change adaptation strategies because it supports national development by improving food security, building infrastructure and educating local populations. Climate-based debt relief may be a mechanism that enables Canada to acknowledge and rectify our carbon debt in a reconciliatory manner with nation-states in which socio-economic conditions need to improve to secure the welfare of its citizenry. Therefore, debt relief as a climate finance tool can both equalize the carbon debt Canada has, as well as encourage development that yields co-benefits for climate adaptation in HIPCs, supported by Canadian partnerships and connections.

GAC should support bottom-up approaches to climate mitigation by partnering with local agencies in HIPCs. Development agencies, such as Alinea, collaborate with local governments and communities to offer expertise, training and capacity-building support for local climate initiatives (Alinea 2024). In the context of CSA, this partnership empowers local communities to enhance resilience against climate impacts in a way that best suits their unique needs while simultaneously promoting sustainable development and poverty reduction in the agricultural realm (ibid). The integration of local knowledge is a priority for many HIPCs throughout Sub-Saharan Africa, as emphasized in the African Union's "2063 Agenda" (African Union Commission 2015). By prioritizing inclusivity and participation, development agencies in HIPCs allow local communities and governments to address the issues burdening their communities in a way that best suits their needs and allows them agency in development processes. Addressing CSA in this way represents a holistic response to climate change, integrating social, economic and environmental considerations. Ultimately, leveraging partnerships with development agencies to support bottom-up approaches to development enables HIPCs to take control of their futures, contributing meaningfully to global climate action while advancing their own development goals.

GAC should continue to prioritize the empowerment of women and girls in HIPCs through climate-resilient agricultural development. Despite efforts, millions continue to suffer from climatic impacts, particularly women and girls in HIPCs. As outlined through FIAP, Canada has made significant strides in supporting women who are vital to global agricultural practices. Presently, Canada's focus lies in economically empowering women through various means, such as endorsing CMA, bolstering local businesses, promoting financial inclusion, ensuring equal market access, advocating for economic rights and providing technical training. These efforts, as outlined in FIAP, yield positive impacts, highlighting the necessity for sustained support for CSA practices in HIPCs (Government of Canada 2021a). Such support equips women with tools and resources, positioning them as experts and managers in future agricultural development (Ogisi and Begho 2023). Hence, Canada must reaffirm its commitment to expanding existing programs, which prioritize the promotion of women in CSA practices. This approach is crucial for building resilience against hunger, inequity and instability.

About the Authors

Julye-Anne McKenny is a student in Wilfrid Laurier University's Master's of International Public Policy program, based at the Balsillie School of International Affairs.

Bradley Watts is a student in the University of Waterloo's Master's of Arts in Global Governance program, based at the Balsillie School of International Affairs.

Madelyn Stimac is a student in the University of Waterloo's Master's of Arts in Global Governance program, based at the Balsillie School of International Affairs.

Acknowledgements

The authors would like to thank Stephanie Cortinovis, Dr. Roy Brouwer, and the faculty at the Balsillie School of International Affairs for their guidance and mentorship throughout the fellowship program.

Works Cited

Akolgo, Isaac Abotebuno. 2023. "Ghana's Debt Crisis and the Political Economy of Financial Dependence in Africa: History Repeating Itself?" Development and Change 54 (5): 1264–95. https://doi.org/10.1111/dech.12791.

African Union Commission. 2015. "Agenda 2063: The Africa We Want."

https://au.int/sites/default/files/documents/36204-doc-agenda2063_popular_version_en.pdf.

Alinea International. 2024. "Alinea at a Glance." www.alineainternational.com/climate-change-humanitarian-resilience-response/.

Codjoe, Samuel Nii Ardey, George Owusu and Virginia Burkett. 2014. "Perception, Experience, and Indigenous Knowledge of Climate Change and Variability: The Case of Accra, a Sub-Saharan African City." Regional Environmental Change 14 (1): 369–83. https://doi.org/10.1007/s10113-013-0500-0.

Energy Capital & Power. 2023. "Angola's Oil Sector to Stimulate Agricultural Development." https://energycapitalandpower.africa-newsroom.com/press/angolas-oil-sector-to-stimulate-agricultural-development?lang=en.

Food and Agriculture Organization of the United Nations. 2011. "The State of Food and Agriculture." https://openknowledge.fao.org/server/api/core/bitstreams/3547e4eb-e763-44d1-88f6-8f573a361854/content.

Gasparatos, Alexandros, Merle Naidoo, Abubakari Ahmed, Alice Karanja, Kensuke Fukushi, Osamu Saito, and Kazuhiko Takeuchi. 2020. Sustainability Challenges in Sub-Saharan Africa II: Insights from Eastern and Southern Africa. 1st Edition 2020. Singapore: Springer Singapore Pte. Limited. https://doi.org/10.1007/978-981-15-5358-5.

Georgieva, Kristalina, Vitor Gaspar and Ceyla Pazarbasioglu. 2022. "Poor and Vulnerable Countries Need Support to Adapt to Climate Change". International Monetary Fund Blogs. March 23. www.imf.org/en/Blogs/Articles/2022/03/23/blog032322-poor-and-vulnerable-countris-need-support-to-adapt-to-climate-change.

Government of Canada. 2019. "Canada's contributions to bilateral and multilateral debt relief initiatives." www.canada.ca/en/department-finance/programs/international-trade-finance-policy/bilateral-multilateral-debt-relief-initiatives.html.

———. 2021a. "Canada's Feminist International Assistance Policy." www.international.gc.ca/world-monde/issues_development-enjeux_developpement/priorities-priorites/policy-politique.aspx?lang=eng.

———2021b. "Annex: Climate-smart agriculture." www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/healthy-environment-healthy-economy/annex-climate-smart-agriculture.html.

Hakura, D. 2020. "What is Debt Sustainability?" International Monetary Fund. www.imf.org/en/Publications/fandd/issues/2020/09/what-is-debt-sustainability-basics.

IMF. 2023. "Debt Relief Under the Heavily Indebted Poor Countries (HIPC) Initiative." International Monetary Fund. www.imf.org/en/About/Factsheets/Sheets/2023/Debt-relief-under-the-heavily-indebted-poor-countries-initiative-HIPC.

Kedir, A., D. Ouma, F. Anguyo and P. Mpuga. 2023. "Africa's Growing Sovereign Debt and Growth: Which." African Development Bank Group, N:374.

Ministry of Agriculture and Agri-Food Canada. 2024. "Agriculture and Agri-Food Canada's Sustainable Development Vision." Government of Canada.

https://agriculture.canada.ca/en/department/initiatives/federal-sustainable-development-strategy/2023-2027-departmental-sustainable-development-strategy#a2.

Office of the Spokesperson. 2024. "The United States and Angola: Partnering for Prosperity." U.S. Department of State. https://www.state.gov/the-united-states-and-angola-partnering-for-prosperity/

Ogisi, Oraye Dicta and Toritseju Begho. 2023. "Adoption of climate-smart agricultural practices in sub-Saharan Africa: A review of the progress, barriers, gender differences and recommendations." Farming Systems. Volume 1, Issue 2. https://doi.org/10.1016/j.farsys.2023.100019.

World Bank. 2024. "Climate Smart Agriculture." World Bank Group. www.worldbank.org/en/topic/climate-smart-agriculture#:~:text=Climate%2Dsmart%20agriculture%20(CSA),food%20security%20and%20climate%20change.&text=Climate%20change%20and%20food%20and,development%20challenges%20of%20our%20time.