

AFRICAN CENTRE FOR BIODIVERSITY

The Africa We want?

A neo-imperialist food regime reinforced by Agenda 2063, the UNFCCC, and the CBD Part 4 of 5

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The African Centre for Biodiversity (ACB) is committed to dismantling inequalities and resisting corporate industrial expansion in Africa's food and agriculture systems.

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Cover: ©UN Women:Ryan Brown. 2018 ©Pablo Tosco:Oxfam. 2012. Flickr **Part four:** Tragic trajectory of African agriculture: plummeting biodiversity, climate change, finance capital and debt

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Fourth in the series, this paper further explores the trajectory of African agriculture, considering the aggressive agribusiness and agro-industrialisation prioritisation, building especially on of this series. Here we discuss the funding and debt landscape and implications of African the fact the climate and biodiversity crises, and the need for addressing long overdue reparations. We consider the African Union (AU)'s Climate Change Strategy and ask what contribution this strategy will make real solutions.

The trajectory of African agricultural and food systems, considering plummeting biodiversity and the climate crisis

The COVID-19 pandemic, extreme droughts, persistent conflicts, and the current war in Ukraine, are disrupting supply chains, creating food scarcity and the inability to produce and access quality, affordable foods in Africa (AFSA, 2022). The situation is projected to get much worse, due to the converging of multiple crises. Yet we continue to see industrial agriculture, with its dependence on increasingly expensive, imported inputs, aggressively being offered as the solution to waning economic and ecological conditions (GRAIN, 2022). Changes in temperature and precipitation patterns are already having direct impacts on food production and considering the continuous, relentless extraction of resources, is expected to lead to more conflicts, migration, and impacts on human security.

> In 2022 alone, extreme weather events — from recordbreaking heat waves and droughts to hurricanes and floods — have hammered nearly every corner of the globe, making the catastrophic impacts of climate change all too visible. Meanwhile, Russia's invasion of Ukraine has caused a global food price crisis, fuelling an alreadypresent global hunger emergency and revealing the



vulnerability of the globalised system – built on industrialised agriculture – to shocks, including climate change, conflicts, and war (IATP, 2022).

It is projected that the production of crops will decline sharply over the next 30 years. The largest declines will be in developing countries, including parts of Africa, and will affect staple foods, such as wheat (-17%), maize (-5%), sorghum (-15%), and millet (-10%) (Knox et al, 2012; FAO, 2018). This will further exacerbate inequalities in the region and globally. The United Nations Food and Agricultural Organisation (FAO) projections show that, except in Eastern Africa, agricultural net imports are expected to increase over the same period in all African sub-regions due to climate change (FAO, 2018). Western Africa will be most affected, followed by Northern Africa.

Climate change can also increase the vulnerability of the supply, transport, and distribution chains on which

international trade depends (Tamiotti, 2009) and lead to significant post-harvest losses (FAO, 2016). Trade policies will worsen the impacts of climatic change, by encouraging and deepening obligations to continue to produce and distribute global anthropogenic greenhouse gas (GHG)-intensive goods (De Pinto, 2017). Food systems are said to contribute between 19% and 29% of GHG emissions, with agricultural production accounting for 80% to 86% of total food system emissions, mainly from enteric fermentation, manure, application of synthetic fertilisers, land use change, and deforestation (Vermeulen et al., 2012).

Climate-smart agriculture (CSA), offered as the saving grace, unfortunately, is not the answer to our woes. While it may offer some possible avenues to begin the transition out of a highly ecologically detrimental industrial agriculture system, in no way is it sufficient to mitigate against climate change; conserve and sustainably use on and off-farm biodiversity; address unequal power relations and human rights abuses; and provide effective solutions to stave off oncoming crises.

Across the board, CSA is heralded as the saviour of African agriculture, despite its limitations and implicit reinforcement of industrial agriculture.

At COP 27 of the United Nations Framework Convention on Climate Change (UNFCCC) we saw greater commitments to CSA, such as the Bill and Melinda Gates Foundation (BMGF) pledging to invest US\$1.4 billion specifically aimed at smallholder farmers in sub-Saharan Africa (SSA) and South-Asia.¹ Accelerating Impacts of CGIAR's Climate Research for Africa (AICCRA) is another promotor of CSA, which runs from early 2021 to December 2023,² among a range of others.

The technological and market focus of the solutions on the table is deeply concerning and fails to ensure the radical transition required. So-called 'Climate Smart Agriculture' mainly employs precision and no-till farming to maintain soil carbon and uses genetically limited, patented, and/or engineered seed, often with toxic synthetic agro-inputs. In regard to climate protection, these practices are in fact counterproductive (Idel & Beste, 2020). Genetically modified seed is in some projects an intrinsic part of CSA. While agroforestry is mentioned in some cases, overall the approach tends to be quite arbitrary, and not central to the practice. Apart from the overwhelming rhetoric on climate protection and sustainability, no proper definition or set of practices can be found for CSA (Idel & Beste, 2020). Mostly, the system is ill-suited for smallholder farmers. CSA is extremely narrow in focus and fails to address the fundamental aspects of industrial agriculture driving the climate and biodiversity crisis.

1. https://www.gatesfoundation.org/ideas/media-center/press-releases/2022/11/helping-african-and-asian-farmers-with-climate-change-adaptation

 https://cgspace.cgiar.org/bitstream/handle/10568/120581/AICCRA%20Mid%20Year%20Report%202022%20-%2017%20Aug.pdf?sequence=5&isAllowed=y

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Financing Africa's underdevelopment

Financial institutions such as the African Development Bank (AfDB), the World Bank, philanthropic foundations, and UN bodies such as the FAO, play hugely influencing roles in financing African agricultural development. Sovereign wealth funds, pension, and insurance funds, and the Grow Africa partnership,³ are channelling investment into agricultural development on the continent. The AfDB has directed over US\$ 100 billion to agriculture since 1967 and more recently, focused efforts to support CSA through initiatives such as the Climate Investment Fund, the Global Environmental Facility, the Green Climate Fund, and the Africa Climate Change Fund, in a bid to engender resilience to climate change and transition to low carbon growth (FAO and AU, 2021).

> Figure 1 below provides an overview of different stakeholders and their roles in Agriculture Research for Development (AgR4D) for Africa. The width of the arrows represents the relative scale of funding from and to different actors (IFPRI, 2018, IPES-Food, 2020)

 The Grow Africa partnership was founded jointly by the African Union (AU), the New Partnership for Africa's Development (NEPAD Agency) and the World Economic Forum in 2011.



Stakeholder roles

Fund Finances research through grants, loans, budget allocations or investments.



Perform Conducts research

financed by funders or through their own economic activities.



Support

Facilitates and accelerates research, e.g. by bringing donors and performers together or by facilitating dialogues.

* Total agricultural research spending in 2016 for all government, non-profit and higher education agencies that conduct agricultural research and that are based in sub-Saharan Africa (excluding the private, for-profit sector and institutions based elsewhere).

** Direct private R&D investments in sub-Saharan Africa are estimated at below US\$100 million. However, global R&D investments by agribusinesses focus on technologies targeting global markets, which include developing countries.

Figure 1: Funds coming into Africa

(Source: Biovision and IPES-Food, 2020)

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Finance capitalism and the rise of agribusiness in African agriculture

The Alliance for a Green Revolution in Africa (AGRA),4 the BMGF, World Bank, and other capitalist financial and philanthropic organisations/institutions driving the expansion of agribusiness on the continent, are behind financing the industrialisation of African agricultural systems. This entails the involvement of behemoths such as Bayer/Monsanto, John Deere, Cargill, and big digital-tech firms like Microsoft and Amazon, and the AIM for Climate project (AFSA, 2022). With the increasing digitisation of agriculture globally, this trend, as well as the use of genetically limited, patented, and/or modified/edited seed and animals to feed into large-scale, industrial agriculture, is expected to grow. Furthermore, this comes with little obvious benefits in terms of reducing or adapting to the climate crisis beyond narrow and short-term economic gains, while smallholder farmers are made obsolete. The Green Revolution itself neither reduced hunger nor provided sufficient access to food but, rather, came with an array of ecological and socio-economic problems that persist today.

The relentless calls over the last few years for a Green Revolution in Africa by its

protagonists have failed to acknowledge the root causes of hunger embedded in political and economic arrangements such as neo-colonial trade agreements.

Figure 2 illustrates the investments by major agribusiness in research and development (R&D) annually.

US-based philanthropic foundations like the Ford and Rockefeller Foundations have long supported and shaped the Green Revolution research agenda globally (Martens & Seitz, 2015). The BMGF dominates philanthropic investments in agriculture (see Figure 3). These foundations have a direct, strategic influence on governments and multilateral organisations. As an example, the BMGF sits on the Advisory Group of the Committee on World Food Security and the CGIAR System Council (Martens & Seitz, 2015). It is also the second largest donor to the CGIAR, after the United States of America.⁵ There is an intricate weaving and coordination taking place between CGIAR centres, philanthropic foundations, development aid organisations (including USAID), and national research centres driving the industrial agricultural agenda. Similarly, the AU itself seems to have been highjacked by corporate interests.⁶

6. See African civil society's open letter and position on the UN Food System Summit https://acbio.org.za/wp-content/uploads/2022/11/africa-re-sponds-to-the-un-food-systems-summit.pdf; and https://acbio.org.za/wp-content/uploads/2022/11/africas-reaction-au-Aafrican-common-position-to-the-un-food-systems-summit.pdf

Now known only by its acronym, AGRA rebranded itself in September 2022, formally removing 'Green Revolution' from its name. This rebranding has been seen as an admission of failure. See https://afsafrica.org/african-civil-society-and-faith-leaders-say-rebranding-the-green-revolution-is-no-solution-we-need-agroecology-for-food-and-climate-action/; https://foodtank.com/news/2022/10/agra-retreats-from-its-own-green-revolution/
https://www.cgiar.org/food-security-impact/finance-reports/dashboard/funder-analysis/



Figure 2: Annual R&D investments by major agribusinesses

(Source Biovision and IPES-Food, 2020)



The BMGF alone has spent nearly US\$6 billion over the past 17 years, primarily in Africa, to 'improve' agricultural practices. The vast majority of the funding is skewed towards technologies developed by Northern research centres and corporations and imported into Africa as techno-fixes, and grants primarily provided to Northern groups, directed mainly at shaping policies to support industrial farming (GRAIN, 2021).

AGRA is funded by the BMGF, the Rockefeller Foundation and USAID.⁷ The Gates Foundation has given AGRA US\$638 million since 2006, covering almost two-thirds of its overall budget. Yet the claim

persists that it is an Africa-led organisation, despite being financed almost entirely by Northern-based organisations (IPES-Food, 2020). AGRA's results are underwhelming to say the least. In the countries where AGRA is active, yields of staple crops increased only 18% over the past 12 years – far short of AGRA's goal of doubling yields. Meanwhile, undernourishment, as measured by the FAO, increased by 30% in those countries (Wise, 2020). In early 2020, the BGMF launched its own new research institute called Gates Ag One. This enterprise claims to speed up the development of new seeds and chemicals and get them to farmers in SSA and South Asia more quickly, yet is based in St. Louis, US – home to Monsanto and other biotechnology and agrochemical giants (GRAIN, 2021). Despite their false claims, AGRA and the BGMF took centre stage at the UNFCCC's COP 27, worryingly galvanising support for technologicallybased solutions, with a focus on smallholders and indigenous crops,⁸ pledging USD 1.4 billion for CSA to small-holder farmers.⁹ This is a major concern, as many African crops have indeed received less attention by African governments' research institutions, yet continue to meet local food requirements, even under drought and climate-induced stressed conditions. Old and new genetic engineering are already focusing on these so called "orphan crops," such as in Kenya and Nigeria. Many of the claims at COP 27 by the BMGF and AGRA contradict and conflict with what AGRA is actually doing on the ground.

^{7.} https://www.climatechangenews.com/2022/09/08/africa-food-crisis-bill-gates-and-smallholders-see-different-solutions/

^{8.} https://climatechampions.unfccc.int/to-reverse-runaway-climate-change-and-build-resilient-societies-we-need-to-transform-food-systems/

^{9.} https://www.reuters.com/business/cop/gates-foundation-gives-14-bln-climate-help-smallholder-farmers-2022-11-07/

General philanthropic donor

or Agriculture and food security-focussed donor

Environmental protection-focussed donor



Figure 3: Main private philanthropic foundations supporting agricultural projects in sub-Saharan Africa, average disbursement per year for agricultural projects (OECD, 2018b; Global Alliance for the Future of Food and Meridian Institute, 2015)

Source: Biovision and IPES-Food, 2020



Foreign aid, whether from Europe, the US, China, or any other source, generally has a major influence on the development priorities in Africa, again holding decisionmaking power outside of the continent.

It is about time that SSA defines its own vision, agenda, and goals and develops pathways for a better future for Africa. Barriers to local decision-making need to be challenged, but how can this be done? It is seemingly insurmountable, with Africa weighed down by so many challenges, entrenched in a particular development trajectory from which the elite benefit. The forces against Africa are simply enormous. Processes should be inward-looking and encourage self- and mutual development, which will require greater regional cooperation as equal partners in trade and technological development. Technologies need to be developed and/or adapted to meet local needs and improve local conditions. Importantly, any and all 'Aid for Trade' should be untied, and not be used to further the private sector and their investments. Worryingly, these efforts continue to serve the extraction of wealth from Africa, in the form of development aid.

Financing dependency

The BMGF and the Rockefeller Foundation, through AGRA, have long been promoting synthetic fertiliser as the solution to low productivity, creating dependence and debt in its wake. Fertiliser usage and increasing productivity are the central dogma guiding agricultural development on the continent, despite evidence showing the costs of the tradeoffs intrinsic to this practice. This notwithstanding, industrial agricultural production's reliance on environmental and social externalities makes it utterly unsustainable, even on its own terms. Food production is not the problem, but rather the range of other systemic factors that drive the need for importation and create and maintain persistent hunger.

Synthetic fertiliser robs the soil and food of essential nutrients, and makes farmers depend on its further use to further production under contrived conditions. The dependence on synthetic fertilisers in industrial agricultural systems is a major concern, depleting the soil of its fertility, life, and health, with disastrous environmental consequences downstream, as well as being a major emitter of GHGs. Industrial agriculture produces a third of total GHG emissions every year, and nitrogen fertiliser emissions account for about 10% of those if you consider the whole cycle of production and use (Garrison, 2022). This corresponds to 2% of overall global GHG emissions and is the primary source of nitrous oxide emissions – a significantly greater GHG than carbon dioxide – besides its production being extremely fossil fuel intensive. The disruption to the nitrogen cycle has long exceeded planetary boundaries, although this is concentrated in the EU, US, India, and China (Schulte-Uebbing et al., 2022).

Since Russia invaded Ukraine, fertiliser prices have risen by an alarming 300% in Africa.¹⁰ With skyrocketing prices, and fertiliser companies reporting massive profits, the world continues to push for more fertiliser production and use albeit with greater efficiency.¹¹

Africa, with its low fertiliser usage, is set to ramp this up, as an essential part of the Malabo Declaration, among others, despite alternatives existing on the continent. Farmers in Africa and elsewhere have been developing bio-fertilisers made from compost, manure, and ash, and biopesticides made from botanical compounds, such as neem tree oil or garlic. These products can be manufactured locally (thereby avoiding dependency and price volatility), and be increasingly scaled up and distributed (Fent and Faye, 2022).

Negotiations at the UNFCCC took uncertain and contradictory turns regarding fertilisers, indicating the world's commitment to these unsustainable inputs, driving unrealistic, unnecessary, and insatiable productivity objectives, which are out of place for a Convention dealing with addressing climate change.¹²

^{10.} https://www.climatechangenews.com/2022/09/08/africa-food-crisis-bill-gates-and-smallholders-see-different-solutions/

^{11.} https://www.desmog.com/2022/11/17/cop27-agriculture-global-fertilizer-challenge-greenwashing/

^{12.} https://www.climatechangenews.com/2022/09/08/africa-food-crisis-bill-gates-and-smallholders-see-different-solutions/

Converging climatebiodiversity-debt crises

The current debt crisis in most countries is failing to get the attention it requires. Unsustainable debt comes from either foreign governments and foreign public institutions (i.e. bilateral creditors); the International Monetary Fund (IMF), the World Bank, and other multilateral creditors; or private actors such as banks and hedge funds. Economic shocks such as falling commodity prices, climate-related disasters, and the COVID-19 pandemic cut government revenues and increased the severity of the debt crisis. In 2020 alone, countries in the global South spent US\$372 billion on servicing debt. This, along with extreme climate events and insufficient grant-based climate finance have forced countries deeper into debt, creating a vicious and neverending debt trap and cycle. Key global actors like the IMF and World Bank have acknowledged the link between debt and the climate crisis,¹³ but insufficient action is being taken by decision-makers like the G7 and G20 (Debt Justice Campaign, 2021). The World Bank has the responsibility to ensure adequate reparations are implemented in the face of climate change and biodiversity loss.

> The Debt Justice Campaign, previously the Jubilee Movement, emphasises that in order to address the climate crisis, urgent action is needed to address the debt crisis in the Global South. Unsustainable debt levels are undermining the Global South countries' ability to adapt to and mitigate the climate crisis because vital resources are diverted

13. https://www.reuters.com/article/us-imf-world-bank-climate-change-debtex-idUSKBN2BU3FO toward servicing debt repayments. Countries in the Global South have been facing increasingly unsustainable debt since the 2008 financial crisis, with debt payments increasing by 115% between 2010 and 2020, reaching their highest level since 2001.

An increasing proportion of the Global South's debt is owed to private creditors (now making up about one-third of lower-income country debt), who tend to charge much higher interest rates than other lenders. Many countries turn to exploit their natural resources as a means of generating finance to repay their debt. Many existing debt contracts are tied to fossil fuel projects that contribute to the climate crisis, such as China's Belt and Road Initiative, which has funded 240 coal-powered plants through loans to Asian and African countries since 2013. African countries such as Uganda and Mozambique are resorting to environmentally and socially harmful oil exploitation to generate financial resources needed to pay off debt. Immediate debt relief is required to prevent such detrimental environmental projects (Eurodad, 2020; Jubilee Debt Campaign, 2021).

SSA's wealth is still being spent on paying back loans for projects that perpetuate poverty, food insecurity and poor governance and maintain global geopolitical inequalities, rather than addressing the fundamental issues, especially the legacy of many unproductive assets, keeping SSA poor.

Worse still is that the much needed resources for climate and biodiversity finance are coming in as loans.

Despite recognition of the climate and ecological debt owed by wealthy polluting nations - and in line with the common but differentiated responsibilities enshrined in the UNFCCC and the Convention of Biological Diversity (CBD), and commitments to mobilise hundreds of billions of dollars in climate and biodiversity finance - these obligations have not been fulfilled (Roberts et al., 2021). This has led countries to turn to other avenues to access resources and take on more debt, with whatever direct climate finance has been forthcoming being in the form of loans.¹⁴ Between 2016 and 2018, 90% of climate finance to Latin America and the Caribbean came in the form of loans. What will more loans mean for the future of an already heavily indebted Africa, already unable to ensure basic public services for its people?

With the CBD's COP 15 ahead, we will likely see the same trend, with financial obligations coming as loans and debt, along with false market-based mechanisms offered as a compromise. New in the discourse at the CBD, spilling over from the climate negotiations, is the concept of nature-based solutions (NbS), which is vaguely defined, and seen as incredibly dangerous by the Global South. It is being punted as a catch-all solution, deeply embedded in disingenuous market-based mechanisms of carbon and biodiversity offsetting. These are proposed as solutions to increase the resilience of agro-food systems and their potential for more sustainable agricultural production systems that use water better, restore ecosystem services and store carbon,

14.www.latindadd.org/wp-content/uploads/2021/07/ANALYSIS-OF-INTERNATIONAL-CLIMATE-FINANCE-IN-LATIN-AMERICA-AND-THE-CARIBBE-AN-FROM-A-CLIMATE-AND-FINANCIAL-JUSTICE-APPROACH.pdf

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and function as entry points to attract investments and be scaled up within productive landscapes.

The whole discourse has become perverse, reinterpreting environmental and social distress as business opportunities.

Various new forms of debt-creating private finance have been developed in order to provide countries with resources to address environmental crises. such as green bonds, catastrophe bonds and natureperformance bonds. All three types of loans are given by commercial creditors to governments. Despite being presented as innovative solutions, debt swaps and market-based initiatives will not adequately address the debt or climate crises, and in the case of marketbased solutions, could exacerbate debt levels and undermine action on the climate crises in the long run (Jubilee Debt Campaign, 2021). Importantly, as Eurodad explains, "market mechanisms are generally not compliant with a human rights-centred approach and, contrary to their objectives, most market proposals are rather false solutions that put the financial burden back on developing countries, worsening the government's fiscal imbalances and even increasing debts. Market mechanisms also fail to enable transparency, accountability, and participatory decisionmaking of those communities that are most impacted by the climate emergency" (Eurodad, 2020, p. 2).

The recently concluded COP 27 of the UNFCCC finally reached an agreement on setting up a funding mechanism for loss and damage due to climateinduced disasters, which is rightfully hailed as a victory.¹⁵ While this may be a step forward in regard to assisting a country that experiences a climate related disaster, it excludes liability or compensation for past harm.¹⁶ It is imperative that negotiations on climate change and biodiversity loss recognise the implicit connection between colonialism and continued extractive processes and geopological inequality driving these colonians inclines inclines.

reparations are duly paid to ensure climate and ecologic mustice, and the ability of countries to adapt, whice and respond to risks and disasters

Negotiations on resource mobilisation in the Post-2022 Flobal Biodiversity Framework (CSF) are far from even 1. It of the UNFCCC. These are unitred mostly on coving new funding mechanizers for benefitsharing revived by digital sequencing information), and what money can be made. This shifts attention away from resources needed to address historical and continuous injustices, unequal development, tied to ecological decimation, as a legacy of colonialism and neo-colonialism, and the need to conserve and sustainably use our life-supporting ecological systems. It is a great worry to see extractivism and transactional underpinnings diving these negotiations and indeed, Africa's development aspirations.

15. https://news.un.org/en/story/2022/11/1130832 16. https://www.globalwitness.org/en/blog/loss-and-damage-is-not-enough



Where to from here?

The AU's Climate Change and Resilient Development Strategy and Action Plan (2022-2032)(AU's Climate Change Strategy) is quite comprehensive, and articulates the challenges posed by climate change, and ways to increase resilience, reduce emissions, adapt and reduce risk. It recognises the intersectional issues facing Africa and the nexus between food systems, climate, biodiversity, among other issues that need attention collectively. Also important is its recognition that research tends to focus on technical solutions rather than the needs and opinions of farmers on the frontline, and the emphasis on protecting landuse rights. In Africa, centrally important in this entire discussion is the incessant conflict and insecurity experienced, ineffective governance and forced urbanisation, affecting the relationship with rural landscapes, in the context of urban planning.

> An important element in the AU's Climate Change Strategy is its call for shifting production towards agroecological transitions, to reduce GHG emissions and dependencies on external inputs. It calls to "support research, extension and implementation of public sector and market-based instruments towards agroecological, regenerative, nature-based and indigenous approaches for integrated farming and pastoral systems for resilient landscapes (practices to increase agrobiodiversity, conserve land and water, cycle nutrients, reduce and enhance productivity" (p. 81). Therefore, there seems to be an opportunity at the AU level to push for greater emphasis on transitioning to just, agroecological agricultural and food systems on the continent. This requires questioning the emphasis to garner industrialisation, agro-export, and open trade, at the AU level, and needs to be engaged with further.

Wezel et al. (2016) propose the concept of "agroecology" territories", looking at transitions towards sustainable agricultural and food systems to take place at the landscape level, considering three major domains for the transition to take place: adaptation of agricultural practices; conservation of biodiversity and natural resources; and development of food systems embedded in territories. They refer to territories as areas delineated, managed, and organised by certain social groupings, and can include local authorities, regional municipalities, among others. From an agronomic perspective, territory refers to the combination of farming systems with ecosystems that lead to varying production systems. This sociotechnical understanding of territory also provides a framework to take up concerns related to conservation, sustainable use, benefit sharing, and valorisation of territorial resources. It would also be helpful to extend this understanding to territorial markets, localising supply and distribution chains. This may be a useful approach to consider potential ways to deepen the approaches related to the intersections between biodiversity, climate, and agricultural and food systems.

The linkage between agriculture, biodiversity, climate change, funding, debt and trade needs to be highlighted, and the barriers to change need to be brought to the fore and tackled. Therefore, counter to

the agro-industrialisation and continued agricultural extraction being used to drive Africa's development, African civil society organisations are demanding a reorientation of this paradigm, and particularly at the GBF. In terms of agriculture, it is essential that industrial agriculture is rolled back, while agricultural biodiversity, the rights of smallholder farmers, agroecology and a just transition in agricultural and food systems are pushed forward. Agroecology, and its relationship with agricultural biodiversity and smallholder food producers, provides this linkage. It offers an important building block to start to reconfigure the trajectory of African food systems, based on agroecological territories, to transition out of the industrial, corporate centred and corporate controlled food system. Considering the current GBF negotiations and the recently concluded COP 27 of the UNFCCC, the AU's Climate Change Strategy, and this linkage with agroecology, is an important step in the right direction and will support efforts for appropriate funding, building on local autonomy, justice, and equity, in the context of climate change and biodiversity loss.

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