ECOFEMINIST PROPOSALS FOR CLIMATE ACTION

Zo Randriamaro
and Nicola Scherer

How debt swaps and carbon markets boycott urgent just transitions

The case of
MADAGASCAR

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Abstract

In this policy paper, we take three examples from the current COP30 negotiations and argue that they are false solutions to overcome the multiple challenges we are facing; this means that they neither resolve the climate crisis nor offer the structural change needed to reduce inequalities. Using Madagascar as an emblematic case, through evidence-based research we debunk debt-for-nature swaps and carbon markets. Both policies are presented as climate solutions by the Malagasy and Spanish governments, a view which is heavily supported by international financial institutions like the World Bank and the International Monetary Fund. However, they mainly benefit rich countries and corporations and fail to bring about the needed systemic change. We also argue that a valid Just Transition Mechanism at COP30 must include the notion of reparations, acknowledging the ecological, colonial and reproductive debts owed to the Global South[1] and to women. At COP30, governments could commit to bold and transformative political climate solutions to overcome the multiple challenges and take a step forward towards a more just world.

1 What do we mean by "Global South" and "Global North"? Rather than referring to countries' geographic locations, the terms "Global South" and "Global North" refer to their relative power and wealth. Global North countries (such as the US, UK, Canada, Australia, Japan and many European countries) have power and wealth, while Global South countries (including many formerly colonized countries in Africa, Latin America, the Middle East and Asia) have less power and wealth on a global scale. While these terms are not perfect and can oversimplify the differences within and between countries (as inequality and poverty exist in countries regardless of their overall income levels), they are a useful shorthand when referring to inequalities in the global system. However, we are aware that there are other important groupings, like the BRICS. BRICS is a group of eleven UN member states: Brazil, Russia, India, China, South Africa, Saudi Arabia, Egypt, the United Arab Emirates, Ethiopia, Indonesia, and Iran. This group has gained economic power over the last few decades. Together, BRICS' gross domestic product (GDP) outperforms the global average, accounting for 40% of the world economy. Through its important role for the global economy, the BRICS group increasingly influences international governance ans spaces like the COPs.

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1. Setting the global framework

Once more, governments from all around the world are gathering at the UNFCCC United Nations Climate Change Conference, more commonly known as COP30 (Conference Of the Parties). This year, the national delegations will gather in Belém, Brazil. The current climate negotiations are taking place in a deteriorated multilateral situation. International conflicts and militarization are scaling up, and the two years of genocide in Gaza show the limited will of the Global North to defend human rights for all. Furthermore, right-wing and far-right governments like the US' current Trump administration are blocking and delegitimizing multilateral decision-making spaces like the COP, hindering democratic global governance. Even though the US delegation is not even expected to attend the COP30 in Belém,[i] they will influence the negations from outside and continue to compete with the second-largest economy, China, like they have at previous COPs.

Besides the multiple political challenges, we are confronted with underlying structural challenges. The climate emergency is getting more devastating by the year, threatening the livelihoods of billions of people and species—especially in the Global South. For example, Madagascar is amongst the world's most vulnerable countries impacted by climate change. The island is considered a cyclone hotspot because it is located in the South-West Indian Ocean region, which is one of the most active areas in the world in terms of tropical cyclone development. These extreme weather events are increasingly frequent and are becoming more intense, modifying the distribution and quantity of rainfall and leading to flooding or droughts. Moreover, global carbon dioxide (CO_2) levels in the atmosphere soared to a new high in 2024.[ii]

Furthermore, with global public debt reaching $97 trillion in 2023,[iii] the world has never been so highly indebted. According to Erlassjahr, 55% of the 152 countries surveyed in the Global South are critically or very critically indebted, in contrast to just 37% before the COVID-19 pandemic.[iv] The IMF's Fiscal Monitor indicates that 80% of the global economy has debt levels that are higher and rising faster than before the 2020 COVID pandemic.[v] These high levels of debt make countries in the Global South vulnerable in different ways. The most impoverished countries depend on IMF intervention and conditional loans that force them to service their external debts before investing in things like education, health, or climate action. UNCTAD statistics show that 19 countries pay more in interest on debt than they invest in education, while 45 countries pay more in

interest than they invest in healthcare.[vi] At least 48 countries, with a total population of 3.3 billion people, are not investing enough in education or health because of the burden of their debt. These austerity policies leave women and girls at a particular, triple disadvantage[vii]: they are the first to lose access to basic services (like health and education), the first to lose frontline jobs in public service, and the first to be left with the burden of unpaid care work that increases when public services fail or when climate-induced disasters occur. The privatization of public services places them out of reach for most women and girls, a situation further compounded for those who face intersectional inequalities based on race, income, class, age, disability, indigeneity, sexual orientation and gender identity.

A range of studies in recent years have shown that there is a vicious circle linking climate and debt.[viii] Extreme events increase both the cost of borrowing and the risk of debt crises in Global South countries that are often already burdened with significant external debt. A study by Action Aid International (2023) shows that 93% of countries most vulnerable to the climate emergency are either over-indebted or at significant risk of becoming so.[ix] Adapting to the climate emergency is costly. In Madagascar, for example, the cost of adaptation was estimated at USD 1 billion per year in 2021, while the total cost of adaptation is currently about 30.1 billion. Furthermore, loss and damage caused by climate-related disasters can lead to a cycle which exacerbates external debt, as countries are forced to borrow to recover and rebuild damaged infrastructure, often on commercial terms and at higher interest rates. In the case of Madagascar, over the last six years losses and damage associated with climate disasters such as floods and cyclone events are estimated at about USD 470-940 million per year.[x] It is a clear example of climate injustice that the small island nations most at risk end up paying the highest interest rates for the loans they receive, based on the consideration that the likely impacts of the climate crisis will put their repayment capacity at risk.[xi]

There is also a gendered impact of the climate and debt relationship. Taking Madagascar as an example, as the Malagasy food system depends on the climate, extreme weather events like extreme heat, droughts, flooding, and cyclones lead to more shocks in food production. Women in rural communities bear the brunt of the intersecting effects of the climate—ecological, social, and food crises—because of their gendered roles as primary producers of household food, caregivers, and providers of water, energy, and other basic requirements for social reproduction (see 2.2.3. Reparations for Madagascar: an ecofeminist cost analysis for Toliara).

With regard to international policies on climate solutions, one important tendency in recent years has been the promotion of tailored green transition plans to reduce CO_2 emissions and decarbonize economies, such as the European Green Deal (2019), the US Inflation Reduction Act (IRA 2022) and China's 14th Five-Year Plan (2021-2025).[xii] However, these plans were designed to guarantee economic growth while reducing CO_2 emissions, basically by substituting polluting fossil-fuel industries and sectors with renewable energies, electrification, and "clean" technologies.[xiii] They are tailored to fit corporate and private investors' needs, making climate a bankable and profitable investment niche. These green transition plans are accompanied partly by just transition plans to adapt waged labour to shifting economies. However, none recognize, value, or invest in paid and unpaid care work (the care economy), much of which is disproportionately carried out by women and marginalized communities. Investing in the care economy is crucial to building more climate resilience so communities can adapt to climate change. The care economy supports the vulnerable populations who are most affected by climate disasters, and it helps maintain the social and economic stability required to implement broader decarbonization strategies. Funding the care economy is important for decarbonization because care work is a low-emission sector, and it can create socially necessary jobs.

Furthermore, as these types of "green" transitions in the Global North are based on new technologies that require immense amounts of raw materials, we are witnessing an increase in global tensions between leading economies (concretely, the US, the EU and China) around securing strategic "transition" materials like rare earths, lithium, copper, or nickel.[xiv] In the EU, the Critical Raw Materials Act (2024) dictates policy regarding raw materials, detailing targets and the strategy to achieve them. However, member states know they cannot meet these targets on their own: besides mining in their own territories, they aim to secure providers in the Global South. In the case of Madagascar, based on the argument of obtaining revenue through raw material exportation, rare earth extraction is most likely to increase. However, mining comes with an enormous social and environmental cost for the affected communities, turning Madagascar into a sacrifice zone for the Global North's "green" transition.[xv]

Regarding debt issues, there is still no international, transparent, and binding debt restructuring and cancellation mechanism for indebted countries. Thus, creditors' interests predominate: the first debt restructuring processes of over-indebted countries in the wake of the COVID-19 pandemic show that creditors are granting as little debt relief as possible. The countries' long-term recovery is deliberately neglected.[xvi] In practice, the IMF's standard package obliges countries to continue opening their

markets to international competition and to focus on the export of raw materials such as critical minerals—deepening extractivist dynamics—and monoculture crops such as soybeans and palm oil as a means of rapidly obtaining foreign currency to repay their external debts, which are mostly owed in US dollars.

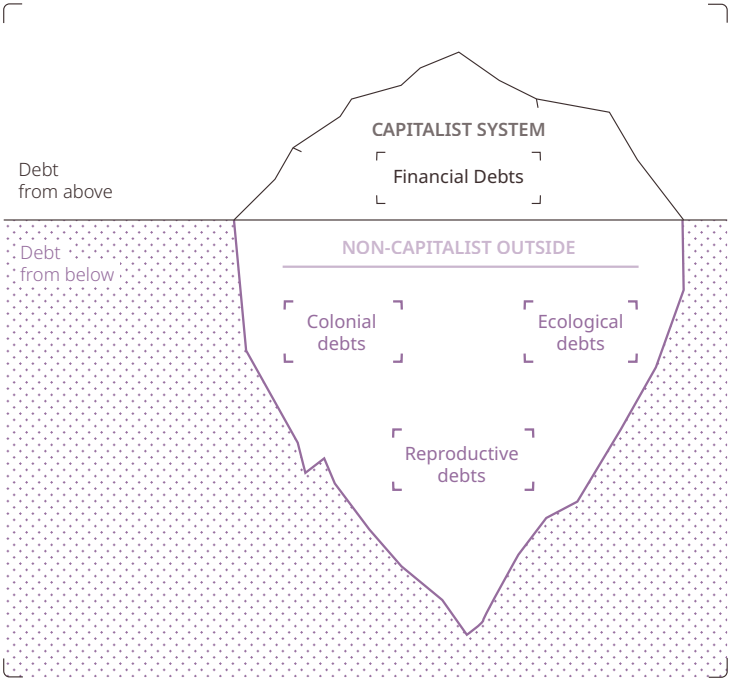
Theoretical framework, visible and invisible debts

Box 1

In order to offer real transformative policy proposals for climate negotiations at COP, we build on feminist, decolonial and ecological justice-based approaches that address the root causes of the ecological crisis and inequalities. Specifically, we use Corinna Dengler's "Invisible Debts: A Feminist Ecological Economics Approach to Debts from Below"[xvii] as a tool to look beyond current climate negotiations. Dengler builds on the idea of "debts from above" and "debts from below" that originated with Max Haiven (2020).[xviii] "Debts from above" refers to "debts owed by the oppressed to the powerful", like financial debts that are backed by institutions like the International Monetary Fund and the World Bank as a key characteristic of capitalism. "Debts from below" indicate "debts which are owed to and sometimes claimed by the oppressed, but which are not honoured or acknowledged by the powerful."[xix] Regarding visible financial debts, they are an essential motor for the accumulation of benefits by powerful donors in the current economic capitalist system. Financial debts are shown in numbers, and those numbers are used by institutions to compare economic growth, decide on financial stability and, in the end, determine macroeconomic policies. Visible debts are the focus of all current international negotiations around macroeconomic policies (G20, OECD, United Nations Finance for Development process, etc.). At COP30, financial debts are a subject under negotiation; for example, they are used to argue if a state has the financial resources to invest in climate action, climate mitigation, adaptation, loss and damage. Meanwhile, invisible debts are not recognized by the majority of states, especially not by the Global North. This is the case for ecological debts, colonial debts, and reproductive debts[2]—each is a specific form of invisible debt.

2 According to Corinna Dengler (2025), the three forms of invisible debt occur on different levels: ecological debts on the level of sovereign debts, vs. reproductive debts at the household level—this makes the quantification of invisible debts impossible.

Graphic 1:
Theoretical framework: Visible and invisible debts



- **Ecological debts** can be defined as the debt contracted by enriched countries with other countries due to the historical and present extraction of their natural resources, the externalized environmental impacts, and the free use of global environmental space to deposit their waste.[xx] There are different categories of ecological debt; for example, climate debt or carbon debt (which refer to disproportionate greenhouse gas emissions, biopiracy, environmental liabilities, the export of toxic waste, or the substitution of crops for export). In recent years there have been many intents to quantify these debts. For example, Fanning and Hickel (2023),[xxi] estimate that rich countries have achieved up to 70% of their economic growth through the appropriation of the "atmospheric commons", and that the climate debt that rich, polluting countries ought to pay to climate-vulnerable, low- and lower-middle-income countries stands at USD 107 trillion.

- **Colonial debts** are debts that former colonizers owe to those who have been enslaved and colonized. Regarding European colonialism, between the 15th and 20th centuries, countries such as Spain, Portugal, France and Britain imposed their rule across the Americas, Africa and Asia, devastating Indigenous communities, cultures, lands and resources through exploitation, the extraction of natural resources, violence and slavery.[xxii] Furthermore, the colonies' struggle for independence was often accompanied by financial compensation to the colonizers. For example, the world's first Black post-colonial republic, Haiti, secured independence in 1804 after a successful slave revolution, but was forced to agree to pay 150 million gold francs to France to compensate for the loss of income from slavery—this amounted to five times the annual spending of the French government and would be USD 21 billion in today's terms.[xxiii] Colonial debts are often linked to the term "odious debts", which are debts that were issued without the people's consent, that did not benefit the people, and where the creditors were (or should have been) aware of both of these facts.[xxiv]
- **Reproductive debts** refer to the debt owed to women who carry out the largest share of reproductive work without monetary compensation. Time-use surveys show that women perform three-quarters of unpaid care work and two-thirds of paid care work globally, and in no country is social reproduction shared equally among genders.[xxv] Nor is care work shared equally amongst women. When a specific community does not cover its own care needs, it delegates care to people (mostly women) coming from elsewhere, thus forming (global) care chains which generate a care debt where the territories receiving migration are indebted to the issuers of migration.[xxvi] These global care chains often follow old colonial dynamics. In this sense, Bengi Akbulut (2023) calls for "a notion of 'social reproductive debt' that includes the racialized and cheapened social reproductive labour flowing from the Global South to the North."[xxvii]

Making invisible debts visible is a powerful strategy and a necessary step to shift the perspective of "who owes whom". It gives legitimacy to claims for reparations, compensation and debt cancellations. The invisible debts should be acknowledged by stakeholders in spaces like the COP30 in order to offer true transformative climate solutions. Governments from the Global North like Spain that claim to be the champions of combating climate change and inequalities should be the first to take a step forward.

2. Madagascar case study

Madagascar is an emblematic case that shows the ongoing, unjust global power relations in the current international climate negotiations and economic policies mentioned before. In the context of global climate policies, the case study of Madagascar makes it clear why certain climate finance mechanisms, like debt swaps and carbon markets, can be considered false solutions that do not resolve the debt or the climate crisis for Madagascar—or for any other country. And by analysing the gendered costs of the climate crisis for the Toliara district, it becomes understandable why the notion of reparations must be included in any just transition plan.

Image 1:
ODG. Toliara. 2024.

Key socio-economic characteristics

Box 2

Located in the West Indian Ocean, Madagascar is the 5th largest island in the world, rich with unique biodiversity and natural assets such as agricultural lands, forest areas, coastline, and precious minerals, including five of the six raw materials deemed "critical" for the energy transition in the Global North. Despite Madagascar's significant natural wealth, over 80% of the island's 30 million inhabitants live below the poverty line,[xxviii] 85% of them in rural areas.

The country's economy is based mainly on agriculture, tourism, mining and the export of primary commodities like vanilla, cloves, cobalt and nickel. The agricultural sector, including livestock and fisheries, is the backbone of the economy, accounting for 86% of all jobs and 60% of youth employment.[xxix] Fisheries support around 2.5 million people, particularly in coastal areas.

The island is currently among the countries most impacted by climate change, experiencing prolonged droughts, increased rainfall variability, more frequent and intense cyclones, and rising sea levels that cause coastal erosion along with significant losses in coral reefs. Its high vulnerability to climate shocks plays a big role in poverty in Madagascar, where an estimated 25% of the population lives in zones at high risk of natural disasters. Storms, including cyclones, are by far the most frequent climate disasters, and have affected Madagascar ten times more than the average African country since 2000. Climate shocks disrupt the biological productivity of both agriculture and the sea, causing critical damage and losses in terms of infrastructure, ecosystems and livelihoods, leading to extreme food insecurity in several regions.

Madagascar is one of the world's foremost biodiversity hotspots, with a unique assemblage of plants, animals, and fungi—over 90% of which are endemic—which is seriously threatened by the impacts of climate change. This biodiversity crisis is exacerbated by deforestation, which began in 1896 when the island was annexed by France as a colony. It is linked to the colonial government's harmful policies on land use and agriculture, which led to "the destruction of approximately 70% of primary forests during the 30 years between 1895 and 1925."[xxx] Since independence in 1960, the unsustainable economic model inherited from the colonial regime has not changed significantly, resulting at in an estimated loss of 22% of Madagascar's primary rainforests between 2002 and 2023 and the decimation of unique species.

2.1. Madagascar's current debt and ecological crisis

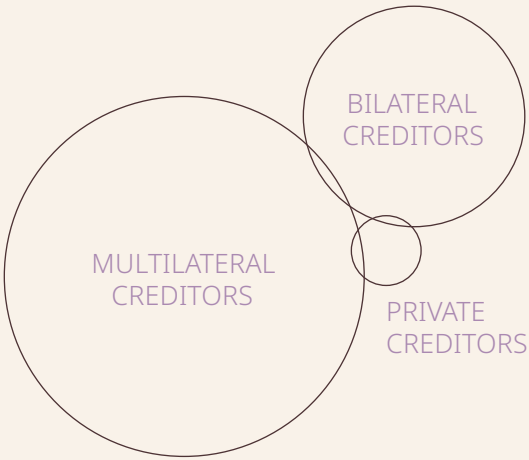


Image 2:
Madagascar, 2017.
Glassholic. Flickr.

2.1.1. Recent debt developments in Madagascar

Key debt concepts[xxxi]

Box 3

External debt is owed to someone (a person, company, institution or government) outside the country concerned. **Domestic debt** is owed to someone within the country concerned. For example, if the Malagasy government owes money to a bank in Madagascar, this is domestic debt. If it owes money to a Spanish bank, this is external debt.

When looking at who owes a debt, **public debt** is either directly owed or guaranteed by a government body (whether central or local). A guarantee is where the government says it will pay a debt if the borrower—often a state-owned company—cannot. **Private debt** is owed by a private company or other borrower which has not been guaranteed by the government. However, "private debt" is also used when referring to whom the debt is owed to (see private creditors).

Generally, in international processes and spaces, when referring to the issue "to whom does a country owe its financial debt?", we are referring to **external public debt**. There are three groupings of creditors to whom a government might owe its debt:

- **Multilateral creditors** are institutions owned by several or many governments. They include large financial institutions such as the International Monetary Fund (IMF) and World Bank, regional development organizations such as the African Development Bank, and lenders established by particular groups of countries, such as the OPEC Fund for International Development. Multilateral creditors coordinate through formal and informal frameworks. When a country cannot repay its debt, it is mainly the IMF that manages debt restructurings and provides assistance through country-specific adjustment programmes.
- **Bilateral creditors.** Bilateral debt is owed to another government. Within bilateral debt, the Paris Club is a group of 22 mainly wealthy Western governments who often negotiate with debtors collectively.[3] "Non-Paris Club", therefore, means other government lenders. Some of the largest of these are China, Saudi Arabia, the United Arab Emirates and India, who have participated in debt restructuring negotiations as ad-hoc members.
- **Private creditors.** Private debt is owed to the private sector. For example, private Banks often make loans directly to Global South countries.

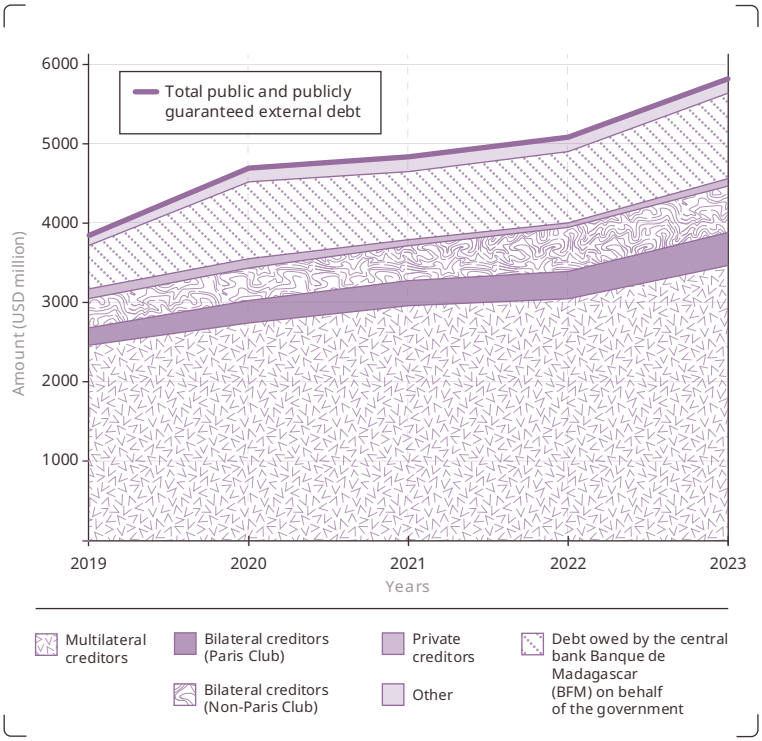
3 Permanent members of the Paris Club are Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Japan, Korea, the Netherlands, Norway, the Russian Federation, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

The most important commercial banks gather together in the London Club to renegotiate sovereign debt owed to them by governments. Negotiations are held in an ad-hoc forum led by an advisory committee, often chaired by a large financial institution. Another way for governments to borrow from the private sector are **Bonds**. A bond is a contract where the government commits to borrow money and to repay it in full in a certain number of years (e.g. 10 years), and to pay interest every year until then (e.g. 3%). The bond is bought by investment funds like Black Rock and can be traded. This means that whoever initially lent the money usually sells the bond to someone else. Such bonds are bought and sold by the millions every day on financial markets. If governments need to negotiate a debt restructuring plan with their bondholders there is no established procedure for doing so, as the bondholders can change in seconds.

External debt presents many risks. For example, external debt leads to resources being taken out of the country and going elsewhere in the world. Furthermore, if the debt is owed in a foreign currency—in US dollars, for example—there is a vulnerability towards exchange rate risks. This means, for example, that if Madagascar's currency (the Malagasy Ariary) devalues, the relative size of the external debt increases rapidly. As mentioned before, if countries enter into debt crises, multilateral and bilateral creditors hold an enormous power over the fiscal and economic domestic policies of the indebted country. Regarding private debt, governments are exposed to the volatility of financial markets, which make debt a profitable investment business.

In order to mitigate these and other risks, for many years social movements and countries in the Global South have emphasized the urgent need for a new United Nations Framework Convention on Sovereign Debt[xxxii] and a UN-based debt renegotiation mechanism[xxxiii] that builds on the principles of responsible borrowing and lending, and which seeks to bring all creditors to the table to negotiate in equal conditions with the indebted governments. African countries have especially been involved in this process. At the same time, as the deleterious impacts of the climate crisis in Africa intensify, the recent momentum on debt has risen to an unprecedented level on the African political agenda. In 2024, for the first time the African Union adopted a common position on debt reform with the Lomé Declaration.[xxxiv] In 2025, during the UN's Fourth Financing for Development Conference in Seville, this was followed by the push from African negotiators for a UN Framework Convention on Sovereign Debt. Debt sustainability was also at the centre of South Africa's G20 Presidency, with the convening of an African Expert Panel on Debt. Other calls for debt reform include initiatives such as the Jubilee Commission,[xxxv] the UN Secretary General's Expert Group on Debt, and the African Leaders Debt Relief Initiative.[xxxvi] Still, this growing awareness has not brought about significant systemic reform and concrete action so far.

Graphic 2:
Madagascar: Breakdown of total public and publicly guaranteed external debt, 2019–2023 (amount USD million)



In 2025, Madagascar has a public and publicly-guaranteed (PPG) external debt of USD 5,743 million,[xxxvii] more than nine times higher than it was 20 years ago, with a debt-to-GDP ratio projected to be around 52.3%. According to the IMF, in 2023, 59.58% of the public and publicly guaranteed external debt was owed to multilateral creditors including the African Development Bank (AFDB), the World Bank (WB) and the International Monetary Fund (IMF).[xxxviii] Debt owed to bilateral creditors from the Paris Club include the Agence Française de Développement (AFD) and Japan International Cooperation Agency accounted for 7.14% of external public debt, while non-Paris Club creditors including the Export-Import Bank of China accounted for 10.05%. 1.62% were owed to private creditors like the Kuwait Fund and 18.49% of external debt was channeled through and held by the central bank of Madagascar, the Banky Foiben\'i Madagasikara (BFM).[xxxix]

In 2025, Madagascar has a public and publicly-guaranteed (PPG) external debt of USD 5,743 million, more than nine times higher than it was 20 years ago.

Out of a total debt financing of USD 1,386 million for 2025, 78% (USD 1,080 million) will be used for undisclosed purposes, 12% (USD 167 million) for budget financing, and 10% (USD 139 million) for infrastructure, while there is no provision for social spending. Debt servicing stood at USD 226,396.131 million, representing 1.46% of GDP[xl]. Madagascar is assessed by the major multilateral creditors at moderate risk of both external and overall debt distress.[xli] However, it is currently the world's fourth-poorest nation state and faces increased pressure and financial hardship because of recent moves by the governments of the US, the UK, and the Netherlands to slash international aid funding by USD 130 million. This will most likely lead to the steady increase of debt to make up for this critical revenue shortfall in the national budget, while directly harming the already impoverished population of Madagascar.

While specific gender-disaggregated data on the impacts of public debt in Madagascar are not available, existing gender assessments[xlii] and analyses of similar cases[xliii] from a feminist perspective indicate that women and girls will be disproportionately affected by the negative effects of debt-induced hardship. In particular, the lack of spending in the social sector that is bound to continue with the increasing national debt burden implies that women will have to compensate for the government's failure to deliver essential social services with their unpaid care and reproductive labour. This will further restrict their access to education, formal employment and economic opportunities, while exacerbating their pre-existing vulnerabilities and gender inequalities in the context of financial strain and economic downturn, including increased risks of gender-based violence.

The lack of spending in the social sector that is bound to continue with the increasing national debt burden implies that women will have to compensate for the government's failure to deliver essential social services.

2.1.2. Climate and Debt Links

While Madagascar's national climate targets require an investment cost of approximately USD 42,099 billion,[xliv] the country's own resources can only cover about 4% of these costs, hence its heavy reliance on external funding to meet its climate objectives. As underlined by the IMF since 2022,[xlv] under a climate-adjusted macroeconomic scenario that includes all humanitarian and reconstruction needs following a disaster, and assuming that the government covers these needs in full, the debt would quickly become unsustainable and exceed 85% of GDP by 2040. Consequently, climate-related disasters have been fully integrated as components of the country's baseline projections in terms of debt sustainability. Thus, the IMF's Resilience and Sustainability Facility (RSF) agreement is meant to support reforms aimed at strengthening climate change adaptation and resilience to natural disasters, proving the Malagasy Government with proposals to create favourable conditions to attract "green" private sector investment.

In line with these private finance-based solutions, Madagascar is the first country to agree on the IMF-World Bank Enhanced Cooperation Framework for Climate Action (June 2024), which aims to coordinate multistakeholders' efforts to support Madagascar's resilience in the face of climate change. It also plans to implement of climate actions, with a focus on catalysing private climate finance and expanding the use of market-based mechanisms such as the Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD+) framework for the protection of forests and biodiversity.[4]

As such, Madagascar is a key example of a country caught in a vicious debt-climate crisis, whereby the country has to borrow money from creditors in the Global North to compensate for the inevitable losses caused by the climate emergency and to adapt to it through specific "green" debt instruments or modes of financing "green" adaption programmes. The normalization of debt and indebtedness as pillars of climate finance dynamics is one of the most obvious neocolonial forms of injustice in the context of climate policies, as foreign creditors still hold a great portion of power over funds allocation and domestic policies.

4 REDD+ can be a considered a market-based solution because it uses financial incentives to conserve forests by creating a financial value for the carbon they store. In this system, companies that pollute are motivated to pay for REDD+ projects, which in turn fund local communities for forest protection, aiming to reduce overall pollution by financially rewarding carbon sequestration through forests.

2.2. False solutions for Madagascar: financing mechanisms that do not resolve the debt crisis or the climate crisis

2.2.1. Debt-for-nature swaps in Madagascar

What are debt swaps and why can they be considered a false solution?

Box 4

A debt swap is the cancellation or restructuring of parts of a government's external debt in exchange for commitments to certain policies. Debt-for-climate swaps liberate funds to be allocated to climate change adaptation or mitigation, such as measures to reduce greenhouse gas emissions or the creation of a solar park. Debt-for-nature swaps liberate funds to be allocated to conservation goals, such as the expansion of a protected marine area or forest. In debt-for-climate swaps, a non-governmental organization (NGO) buys sovereign bonds—part of a country's debt—after negotiating a discount with the creditors of that debt. The NGO then collects the interest on the debt in local currency and invests it in an environmental or climate preservation project. Then, the creditor (mostly Global North countries) can report this debt cancellation as official climate finance to the United Nations Framework Convention on Climate Change (UNFCCC).

Debt swaps are currently being promoted by international financial institutions, investment funds, and creditor governments as "win-win" solutions to combat both the debt crisis and the climate crisis (without having to mobilize new resources).[xlvi] This is due to two global trends. Debt levels across Global South countries have reached their highest levels in 25 years,[xlvii] with many spending more on debt payments than on addressing the climate crisis (see Chapter 1). At the same time, climate finance from rich countries—that, according to COP29 agreements, should scale up from USD 100 billion to USD 300 billion annually by 2035—in practice fall short and will probably decrease even more in 2025 due to planned Official Development Aid cuts by right-wing Global North governments. According to recent analyses,[xlviii] rich countries claim to have mobilized USD 116 billion in climate finance for

2022, but the true value is only around USD 28-35 billion, less than a third of the pledged amount. Nearly two thirds of climate finance was provided as loans, adding more to the Global South's debt each year, and rich countries continue to ignore the need for substantial loss and damage finance. At best, about 1% of total bilateral climate finance in 2022 may have been dedicated to loss and damage interventions.

Several studies[xlix] have found that debt swaps can be considered a false solution for resolving both the debt and climate crises for the following reasons:

- Debt-for-climate and debt-for-nature swaps do not meaningfully reduce debt levels, as the debt is not cancelled; it just changes creditors and the interest is maintained, although its destination is rectified.
- Debt swaps can be slow, burdensome and expensive.
- Debt swaps can fail to deliver on nature and climate goals, while legitimatizing illegitimate debt.
- Debt swaps are based on conditionality, lack transparency, and undermine local communities' participation.
- Debt swaps distract from Global North countries' unfulfilled commitments and from the adequate solutions we urgently need.

In 1989, Madagascar engaged in its first debt-for-nature swap (DNS), which involved a Swiss-based international non-governmental organization (NGO) and the US government, providing USD 2.1 million in debt relief for conservation projects. The 1989 debt-for-nature swap focused on conservation projects such as training nature protection agents, supporting forest management, and conducting wildlife preservation and reforestation efforts. The US provided a USD 1 million grant to the NGO, which used this money to purchase USD 2.1 million of the nation's debt on the financial market at a discount. In exchange, Madagascar used the local currency for environmental activities. Furthermore, in 2001 Madagascar entered into negotiations with the Paris Club around bilateral debt-swaps. 2003, Germany and Madagascar completed a debt-for-nature swap where Germany cancelled EUR 23.3 million in debt in exchange for Madagascar allocating EUR 13.8 million to a counterpart fund for environmental projects over 20 years. This was followed by a DNS worth around USD 20 million (EUR 13 million) with France in 2008 to preserve its biodiversity, which is critical for climate mitigation and resilience.

Moreover, since 2024 Madagascar has been one of five African nations that are preparing to launch what could be the world's first joint DNS exchange. Called the "Great Blue Wall" project,[l] it aims to raise at least USD 2 billion to protect and restore 2 million hectares of Indian Ocean ecosystems by 2030. These countries—which include Kenya, Madagascar, Mauritius, and Tanzania—are all located in the western Indian Ocean, and share fragile marine ecosystems that are crucial to the survival of more than 70 million people who depend on fishing and tourism. This project is supported by a global group of nature conservation organizations including the International Union for Conservation of Nature (IUCN), and by the US and UK governments.

The promotion of debt swaps will probably go on. Recently, at the 14th UNCTAD Conference on Debt Management in March 2025, the Minister of Economy and Finance of Madagascar again advocated for the debt swaps mechanism "to be activated very quickly, given the scale of climate damage."[li]

Despite their proponents' claim that debt swaps reduce debt levels while also freeing up funds for climate or nature goals, debt swaps have not provided the promised solutions: neither have they significantly reduced Madagascar's debt level, nor could they stop deforestation and biodiversity degradation, as described in Chapter 2.1.: Madagascar's current debt and ecological crisis.

The 1989 debt-for-nature swap has also shown that for intermediary NGOs from the Global North, such swaps are a lucrative transaction to engage in. Through swaps, the NGO involved has secured substantial funds in local currency for conservation. From 1989-2008, the NGO generated over USD 50 million for conservation activities in Madagascar.[lii] Those funds inherently involved conditionality, as the NGO had much more control over the allocation of the resources than if the debt was simply cancelled outright. It took away the autonomy of the Malagasy people by imposing certain forms of conservation that are often at odds with local knowledge and needs.

The case of Madagascar also shows that debt swaps are problematic because of their lack of transparency and democracy, and the risk of corruption. No debt-for-nature swap transaction guaranteed the free, prior, and informed consent of those affected; negotiations were opaque and held in secret; and there is no information on the fees the NGOs received for managing the transactions. Thus, this lack of transparency poses a significant barrier to the participation of local communities in decision-making and oversight of debt swaps.

2.2.2. Carbon markets for Madagascar

What are carbon markets and why can they be considered a false solution?

Box 5

In short, carbon markets put a monetary price on CO_2 emissions. If you pay, you can pollute.

Since a carbon dioxide (CO_2) trading scheme was first introduced during the 1997 UN climate negotiations in Kyoto, carbon offsets have come to dominate policy discussions by Western policymakers, and, consequently, international climate negotiations. The 1990s saw an expansion of corporate power enabled by the rise of neoliberalism, which allowed the same corporations that caused much of the climate crisis to heavily influence the proposed "solutions".[liii] The 2015 UN Paris Agreement opened the door to a potentially massive expansion of carbon markets, and included forest-based offsets in the negotiation documents.

Today, international carbon markets are part of Article 6 of the Paris Agreement, where they are presented as a way to finance decarbonization by giving incentives. Carbon markets enable governments and non-state actors to trade greenhouse gas emission credits. In practice, parties that have successfully met their own emission reduction targets can sell their extra reduction credits to those who have not. In theory, this should convince the private sector and governments to move investments to areas and sectors where emission reductions are needed, with the idea "it's cheaper not to pollute".

There are two types of carbon markets: compliance and voluntary.[liv] In compliance markets such as national or regional emission-trading schemes, participants act in response to an obligation established by a regulatory body. In voluntary carbon markets, participants are under no formal obligation to achieve a specific target. Globally there are numerous individual markets, including around 30 compliance markets (like the EU's) and hundreds of other carbon pricing instruments, according to a World Bank report.[lv]

Carbon markets can be seen as false solutions because despite the rhetoric of decarbonization and "net zero" businesses, carbon offsets perpetuate the damaging model of "growth at all costs".[lvi] They have become a business, as they allow corporations to make a profit through the commodification of emissions by putting a monetary price on greenhouse gases. There is a great deal of evidence demonstrating that carbon offsetting does not work

to reduce emissions. Multiple studies have shown that a large proportion of carbon credits do not represent any actual emissions reductions.[lvii] Increasingly, research is also exposing serious human rights abuses linked to offset projects.[lviii] The offset industry is driving large-scale land grabbing for offset projects, which frequently leads to forced evictions of traditional and Indigenous communities and places serious limitations on their livelihood and how they interact with their territories. People, their lands and the environment—mostly in the Global South—are instrumentalised to protect and advance the economic interests of the Global North. The offset industry reinforces colonial relations between North and South and is increasingly described in terms of "green colonialism"[lix] or "carbon colonialism".[lx]

Madagascar is fully integrated into the global carbon market industry, as its rich biodiversity attracts carbon offsets that transnational companies purchase to reduce their reported greenhouse gas net emissions (GHGs), particularly in the framework of the national REDD+ strategy. As explained before, REDD is part of the United Nations Framework Convention on Climate Change (UNFCCC) initiatives to mitigate climate change. It was extended in 2009 to REDD+ to include activities that increase carbon stocks. As part of international commitments to reduce GHGs, the REDD+ mechanism was intended to enable countries to purchase carbon credits from other countries that reduce deforestation in their territory. This mechanism, developed for the international forest carbon market, is supposed to enable Madagascar to benefit from substantial funding to contribute to the sustainable management of its natural resources and its economic development. Thus, the REDD+ mechanism is not only part of the National Forest Policy promulgated in 2017, but is also at the centre of the national strategy for addressing the socio-economic and political factors driving deforestation and forest degradation as well as climate change in general.

According to the economic incentive principle of REDD+, users are expected to change their behaviour by voluntarily restricting their ownership and usage rights of forest resources, motivated by the existence of monetary or in-kind compensation. Forest resource users are therefore directly called upon to voluntarily participate in the process of managing deforestation reduction, particularly in the context of transferring forest resource management to the communities concerned.

In May 2023, members of the Youth Network for Sustainable Development (YNSD) within CRAAD-OI conducted field work to evaluate the REDD+ Programme Atiala Atsinanana (PRE-AA).[lxi] They sought to show the limits of forest conservation in Madagascar based on economic incentives, as well as the limits of market-based compensation for environmental damage. The Atiala Atsinanana (PRE-AA) programme is the first project to implement Madagascar's national REDD+ strategy, intended for the sale of carbon credits. This REDD+ project has been implemented since 2008 by the International NGO Conservation International in the rural communes of Ambohimanana, Maroseranana, and Fetraomby in the Brickaville district, located in the eastern rainforest ecoregion known as Atiala Atsinanana. The REDD+ project was intended to achieve four main objectives:

- reduce emissions from deforestation and forest degradation;
- conserve and enhance carbon stocks;
- contribute to maintaining the ecological functions of forests and conserving biodiversity; and
- ensure sustainable management of forest resources.

The field research revealed that the PRE-AA was implemented unilaterally by its promoters without the required transparency and effective community participation. At the time of the survey, almost all of these local communities—who should be the direct beneficiaries of the project—were unaware of its existence. Most importantly, the research findings show that the objectives of the PRE-AA have not been achieved, while its implementation tends to go against climate justice.

In general, the survey results show that the REDD+ project is a false solution to its objective of reducing greenhouse gas emissions (GHGs). Indeed, Madagascar's carbon accounting method leaves much to be desired, while transnational companies produce GHGs without interruption, stabilizing and developing the economies of their countries of origin in the process. In the meantime, the affected local communities merely suffer and pay for the resulting social and environmental damage without actually benefiting from the financial contributions that the REDD+ mechanism can generate. This only reinforces the inequalities between the major polluters in the North and the affected people in the South.

The same applies to deforestation. There has been no significant reduction at the local level, but instead a worrying upward trend at the national level. Therefore, the conservation and enhancement of carbon stocks are still far from assured.

In addition, the REDD+ mechanism undermines a number of human rights, notably the right to food, the right to a healthy environment, and cultural rights in relation to natural resources, land and forests. There are serious restrictions and prohibitions regarding access to the forest, which has been classified as a protected area. These restrictions only exacerbate the adverse effects of climate change on the fundamental rights of local communities, who are entirely dependent on the forest for their livelihoods, food, housing, health, and so on.

To make matters worse, no solution has been adopted for the affected communities, who are left to their own devices and forced to continue their destructive forestry practices, including slash-and-burn agriculture, tree felling and clandestine charcoal production. This situation has subsequently led to a division in local society between the vulnerable population and the local elite, which has the capital and the power to exploit the forest resources and the minerals found therein (gold, precious stones, etc.). Therefore, this REDD+ project has failed to provide the affected communities with the economic incentives that could really change their behaviour, enable them to relinquish their user rights, and contribute voluntarily to the process of reducing deforestation.

These findings from the YNSD's research are in convergence with the conclusions of another study on the REDD+ pilot projects in Madagascar,[lxii] which points to "a gap between the economically ideal form of the REDD+ international mechanism and its national implementation as a constraining conservation tool in Madagascar. This gap is mainly due to the existing unbalanced power relationships between the local population and the project managers. Far from having initiated a new area of conservation policies based on incentives, REDD+ in Madagascar mainly serves to fund existing coercive policies."[lxiii]

These restrictions only exacerbate the adverse effects of climate change on the fundamental rights of local communities, who are entirely dependent on the forest for their livelihoods, food, housing, health, and so on.

2.2.3. Reparations for Madagascar: an ecofeminist cost analysis for Toliara[lxiv]

What are reparations, and why is this notion important for the Just Transition Work Programme at COP30?

Box 6

Reparations refer to more than just financial payments:[lxv] they are a comprehensive approach to repairing the historical and ongoing harm caused by colonialism, patriarchy and racism. This includes material reparations like land, financial compensation, and restorative economic systems, as well as epistemic reparations that involve acknowledging wrongs, sharing histories, and decolonizing knowledge. In practice, the call for reparations has become a cross-cutting issue in feminist, decolonial, antiracist, economic justice and climate justice movements. Reparations can be linked to the recognition of ecological and climate debt, defined as the historical and moral responsibility of those who caused the climate crisis to make reparations and amends for harms done to the affected countries and their peoples (see Chapter 1: Theoretical framework). Reparations imply repaying and repairing the debt owed by countries in the Global North to countries in the Global South, which was built up during the colonial past and is further exacerbated by neocolonial dynamics. Finally, reparations include the recognition of reproductive debts, taking into account care and the intergenerational, cultural and social costs of the climate crisis, which are mostly invisible and borne by women.

The United Nations Framework Convention on Climate Change (UNFCCC) does not have a formal policy for reparations. However, the concept of reparations has been introduced by climate justice movements and Global South countries into the negotiations around Climate Finance and Loss and Damage (to compensate countries that were hit by an extreme weather event). COP30 offers a new opportunity to claim reparations, especially taking into account gendered impact and care work, and connecting it to the negotiations around Just Transitions.

The UN's Just Transition Work Programme (JTWP) is a framework under the UNFCCC to help countries transition to low-carbon economies. Established at COP27 and operationalized at COP28, its goal is to support countries developing national plans that especially address labour impacts in transitional areas (e.g. those shifting from fossil fuels to renewable industries). However, this is not its only goal. The JTWP also works on mitigating social

and economic impacts, including social protection, while aligning with overall development priorities for each country.

In the latest version of the negotiating document, the parties recognize "the importance of gender- and human rights-based approaches to just transition pathways that respect, promote and fulfil all human rights, including, but not limited to, the right to health, the right to a clean, healthy and sustainable environment, and the rights of Indigenous Peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations, as well as gender equality, empowerment of women and intergenerational equity."[lxvi] No mention can be found regarding the idea of reparations for the accumulated ecological, colonial and reproductive debts owed to Global South countries and women. However, if Just Transition Plans are meant to help countries to transit towards low carbon economies in a more equitable and just way, those invisible debts must be recognized.

So far, Just Transition Plans have been developed especially by Global North countries. Furthermore, they focus mainly on domestic policies, especially concerning workers (paid labour) who work in fossil fuel industries and have to shift to sectors with lower CO_2 emission like renewables, while providing funds and guarantees for the affected regions and companies to protect corporate profit (see, for example, the EU's Just Transition Mechanism[lxvii]). For now, Madagascar does not have a Just Transition Plan. With regards to climate policies, the country only has an NDC (Nationally Determined Contributions) plan under the Paris Agreement, which barely mentions a just transition for the country.

Image 3:
ODG. Toliara. 2024.

We believe that any Just Transition Plan should have an external dimension, taking into account external impacts and historical and current responsibilities to enable truly globally just transitions.[lxviii] This includes the recognition of ecological, colonial and reproductive debts.

The following ecofeminist costs analysis of the climate crisis in the Toliara district, conducted by CRAAD-OI in collaboration with WoMin, is meant to provide the Malagasy delegation with evidence-based and concrete demands for reparations in its advocacy efforts for the upcoming COP30 negotiations. Gendered impact analyses are key to understating the different impacts, and can also help to settle domestic policies that include funding the care economy and including care work (mostly done by women) in decarbonization and transition plans.

The case study conducted in four communities of farmers and fishers affected by climate change (Ranobe, Benetse, Ankililoaka, Manombo Sud) in the Toliara II district identifies the costs linked to the climate and ecological crises that are externalised onto women and the environment. Nevertheless, these costs are ignored, and neither is paid for or compensated by corporations and states in the existing assessments of the costs of climate change in Madagascar. It is important to note that a large part of the external costs that have been identified cannot be quantified with precision or estimated in monetary terms. This is especially because most of the costs borne by women are outside of the capitalist system, and such external costs are mostly non-economic and result from slow-onset events. The base year for this analysis is 2018, which marks the onset of the great drought and climate crisis in the Toliara II district.

The gendered impacts of climate change in the Toliara II district

Toliara, one of the districts most affected by droughts.

Box 7

The climate of Toliara II is tropical and semi-arid, characterized by a long period of drought from seven to nine months between March and December. It is one of the districts most affected by drought in Madagascar, with a natural water deficit that results in a propensity for the salinization of water and soil, and where human activities are likely to aggravate the process of land and water degradation.

The main manifestation of climate change is the increase in daily minimum temperatures, which was more than 1°C from 1961 to 2005. While climate change experts predict that the average annual temperature in southern Madagascar will increase by at least 1.5°C by 2050 as compared to the 1961-1990 period, Toliara actually experienced an average temperature of 36-37°C during the last week of January 2023, which points to a higher than expected increase.

The Toliara II area is home to several types of terrestrial ecosystems, including a dense mangrove forest, terrestrial coastal forest, marshland, grassland, rangeland and savannah, baobab trees, estuary, and a freshwater aquifer. The reduction in the related ecosystem goods and services is already visible in the increased number, intensity, and duration of extreme events such as droughts that negatively affect biodiversity and reduce productivity.

The existing coastal/marine ecosystems in the Toliara II area include coastal river and wetlands, fringing coral reefs, sandy beaches, rocky coast, and sand dunes. In addition to a sea level rise, with a gradual increase in sea surface temperature of 1 to 3°C and the acidification of the ocean, the climate crisis has reduced the number of marine species (molluscs, crustaceans, and cold-water coral reefs).

According to scientists and experts, the climate crisis and the associated biodiversity crisis increase stress on both terrestrial and marine ecosystems, resulting in their reduced productivity and resilience. This is clearly visible in the Toliara II district, where the ratio between cultivated and arable land fell from 76.0 in 2009 to 28.64 in 2017. The major factor that explains this significant reduction in the area of cultivated plots is insufficient rainfall due to climate change, which prevents crops from being planted at the right time. Other factors include the silting-up of cultivated land and a lack of materials for farmers.

External costs from food insecurity and malnutrition

Extreme weather events related to climate change disrupt food production, causing crop failure and reduced nutritional quality together with particularly substantial income losses for farmers in the Toliara II district. Inhabitants frequently experience acute malnutrition, with over 20% of households facing food deficits. Poor nutrition is a critical health issue, with nearly 50% of the local population stunted and over 40% anaemic.

As research findings have confirmed, the local populations that are dependent on subsistence agriculture are particularly vulnerable. In particular, poor households that are reliant on self-subsistence food production systems are easily disrupted by climate-related shocks and stresses. In the fishing community of Manombo Sud, the losses in self-subsistence food production are estimated at an average of 270,000 MGA/month/person. For the farming communities in Ranobe and Benetse, these are estimated at an average of 1,462,500 MGA/month/person.

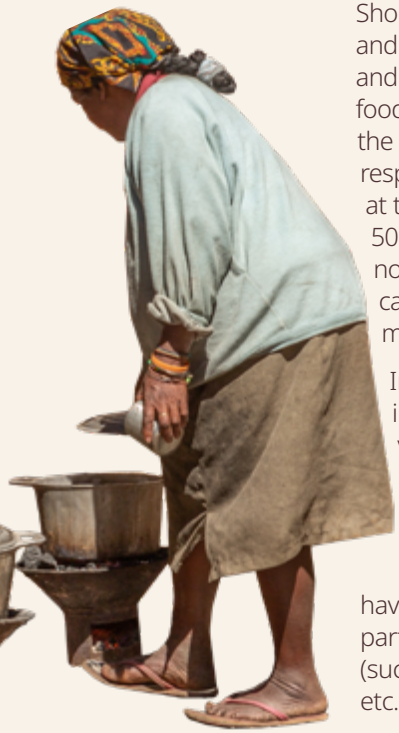


Image 4: Madagascar, 2017 Glassholic. Flickr.

Shortages of food staples disproportionately impact girls and women who play an essential role in producing food, and yet are usually the last to eat when families become food insecure. The research also found a deterioration in the size of rations consumed per meal. Before 2018, all respondents ate a ration considered normal at each meal; at the time of the study, this ration had been reduced by 50% in Ankililaoka and Manombo Sud, and by 70% in Ranobe and Benetse. Moreover, there had been a significant change in their diet, which no longer included rice, maize and bananas at the time of the study.

In addition, the vast majority of respondents noted an increase in the price of basic foodstuffs (rice, cassava and maize). This increase was about 50% for local and imported rice, and about 35% for cassava and maize. The focus groups mentioned that the poorest households were less able to afford food. This increase in prices at a time when poor households have limited food reserves and reduced access to work is partly responsible for the use of erosive coping strategies (such as decapitalization, the sale of land and livestock, etc.), which constitute additional costs by themselves.

External costs from increased women's unpaid and reproductive work

The study results confirm that climate change can affect the quantity and accessibility of clean water. This can impact girls and women more, as they are largely responsible for water collection in their communities. In Ranobe village, for example, women and girls have to walk for 4 hours a day to fetch water. In Benetse village, where locals must buy drinking water, women living in poverty and their families are disproportionately affected by the frequent water shortages. They had to reduce their water consumption to 25% of its usual volume before 2018 because of rising water prices and their declining incomes.

Moreover, women's unpaid and reproductive work is further increased by the collection of fuelwood, which now takes up a major part of their time budget as a result of increased forest losses due to climate-related droughts and wildfires. Thus, women in the fishing community of Manombo Sud must now walk for 4 hours, when before 2018 they only walked 2 hours. Women in Benetse must walk for 10 hours, while before 2018 they only walked 2 hours to obtain fuelwood. It should be noted that the sale of fuelwood has become a coping strategy for the latter to address the loss of their livelihoods and income as farmers.

Image 5:
Madagascar, 2017
Glassholic. Flickr.

External intergenerational costs

There is ample evidence that the loss of the Toliara II area's ecosystems and biodiversity is not only reducing tourism and its associated economic benefits, but also the quantity or value of goods and services available to local families, communities, and future generations.

Thus, a survey[lxix] on perceived ecological changes by household conducted in some villages in the Toliara II district has shown that the loss of biodiversity as a result of ecological degradation or changes has had significant negative impacts on livelihood, notably a loss of access to natural forest resources and reduced access to the sea or rivers for fishing. Losses in income from fishing are estimated at 320,000 MGA/month/person. The availability of fishery resources such as lobsters had also deteriorated for almost all respondents, who mentioned five other fish species that are becoming extinct.

With respect to the food that they used to get from foraging in the forest, women in Ranobe and Manombo said that they had lost access to two food products (baboho and lamoty). In Benetse, women said that these food products served only as a supplement to their daily rations before 2018, but that these have now become their staple foods and are increasingly difficult to find.

In addition, the women who serve as guardians of traditional knowledge in their respective communities indicated that about 15 endemic species used as traditional remedies by 95% of local communities are on the verge of extinction. This finding should be situated in a context where 95% of the population do not use public health services, resorting instead to traditional healers in case of illness.

More generally, households observed a decrease in crop productivity, mostly attributed to a decrease in water availability. Most of those who did not feel safe linked this impact to drought and increasing water scarcity.[lxx] Altogether, these losses in natural wealth and choice in a compromised environment and climate constitute significant external costs for future generations that are not easily estimated in monetary terms.

Gendered external costs from public health issues and risks

The above survey found that over the past 20 years, remaining healthy has become more difficult for 53% of households. When asked directly, almost one quarter of households perceived mainly negative impacts of droughts on their health. Women and girls are more susceptible to many of these health issues due to physiological differences. Climate change also increases risks related to maternal and child health; for instance, there are increased incidences of stillbirth resulting from extreme heat.

With respect to acute and chronic respiratory infections, this study confirms that the use of fuel wood by more than 95% of the respondents in the district of Toliara II implies that climate change is expected to increase concentrations of air pollution from this type of fuel burning, which is responsible for approximately half of all deaths from ischaemic heart disease and contributes to approximately 30,000 deaths per year in Madagascar.[lxxi] Given the existing gender division of labour, the large majority of those who are most exposed to such lethal air pollution are women.

The interviews and discussions with women's groups also revealed that the climate crisis profoundly impacts their mental wellbeing. This was expressed through their testimonies about their anxiety, fear, hopelessness about the future, as well as the mild depression experienced by many of them.

Image 6:
Madagascar, 2017
Glassholic. Flickr.

External cost from destruction of cultural and social capital

Destroyed local ecosystems include several cultural and religious sites that bear witness to the region's history, and are also the symbols of the customs and traditions still jealously guarded by the local population. As such, these have intrinsic archeological value, sacredness, or other forms of cultural significance that cannot be easily amended or compensated for through wages or financial indemnities.

In this regard, the women's group interviewed in Benetse lamented the fact that because of their climate-induced impoverishment, they no longer have the resources to take care of their King's palace, a cultural monument that they used to carefully maintain.

In general, women at all research sites felt increased social tensions due to climate-related stress, competition over scarce resources, and the increasing number of climate refugees from other locations. With respect to changes to customs and traditional practices, respondents at all sites indicated that the sharing of food with neighbours and visitors was no longer practiced, and that there is much less solidarity among communities. Interestingly, women in the fishing community mentioned that they no longer wait for men to eat, while before 2018, husbands and fathers-in-law were first served; what remained was then given to children.

External costs of living in perpetual crisis and the inability to recover from losses

Along with other research, this study points to additional high external costs of climate change, such as the loss of security, social harmony, and quality of life by the local population, which has also had to spend more time and money to maintain its standard of living.

In this regard, the target groups' perceptions of stress vs. well-being before and after the onset of the climate crisis were measured on a scale of 1 to 10, where 1 means an extreme feeling of worry and stress, and 10 means a great feeling of happiness and well-being. In all cases, perceptions dropped from 5-6 before 2018 to 1-3 at the time of the study.

In addition to this depression and anxiety, women and their communities will now have to live with an increased risk of natural disasters and other undesirable events, which must also be included as part of the external costs.

Image 7:
Toliara. ODG. 2024.

To conclude, women in affected communities bear the brunt of the intersecting effects of the climate, ecological, social, and food crises facing the Toliara II district because of their gendered roles as primary producers of household food, caregivers, and providers of water, energy, and other basic needs required for social reproduction. From an ecofeminist perspective, the study confirms that climate change imposes higher externalised costs on women by eroding their role in food production and stewardship of natural resources, while undermining their livelihoods and right to an adequate standard of living. The disproportionate burden on women includes increased unpaid labour, reduced access to resources, and erosion of their roles in food production and natural resource management. Because of structural gender inequalities, they are also the most vulnerable and unable to adapt to the short-term and long-term impacts of the climate crisis.

However, the costs linked to the climate and ecological crisis, which are externalized onto women and the environment, are ignored. They are neither calculated nor compensated for by corporations and states in the existing assessments of the costs of climate change in the context of Madagascar. Therefore, any Just Transition Plan must include strategies to counteract these gendered impacts and propose strategies to move towards low-carbon economies that can also eliminate existing gender inequalities.

The case study of the Toliara II district in the south-west region of Madagascar shines light on the other ramifications of the climate debt that have hitherto been hidden, concealing the ecological, reproductive, intergenerational, cultural and social costs of the climate crisis, which are mostly borne by women. These hidden costs must be fully recognized and accounted for as part of the debt owed to them by the countries that are responsible for the climate crisis and the consequent loss and damage that Madagascar has long experienced.

3. Policy recommendations: Just debt and climate finance solutions for Madagascar

Key recommendations for sustainable and just debt and climate solutions from an ecofeminist perspective include making the following demands at COP30.

Image 8:
Toliara.
ODG. 2024.

Recomendation 1.

Addressing the debt crisis and climate debt

Global North countries should commit to recording their historical and ecological debts and offer mechanisms to compensate countries like Madagascar, which suffer loss and damage as a result of the climate crisis.

Cancelling the debts of countries in the Global South is a prerequisite for freeing up domestic resources for critical climate action, including the funds needed for a just transition in these countries.

A debt moratorium (without interest payments) must automatically be implemented following extreme weather events.

Truly additional funding for climate finance, including loss and damage, must be provided by Global North countries in the form of grants and must not generate new debt.

Debt-for-climate swaps should not be used as a solution to address both debt unsustainability and climate finance gaps while protecting the status quo of financial globalization.

Recomendation 2.

A fair, equitable and fit-for-purpose new finance goal

The New Collective Quantified Goal (NCQG) on climate finance must be based on the recognition of the reality that the financial needs of Global South countries are close to USD 2.4 trillion a year by 2030, which is far beyond what they are currently receiving.

Commitments to providing financial adaptations must meet adaptation needs set to grow to more than USD 300 billion dollars a year by 2030.

Funding must be sourced in Global North countries in accordance with the principles of common but differentiated responsibilities and respective capacities, as well as the "polluter pays" principle.

Climate finance must support locally-led approaches that correspond to the needs and priorities of rural women, children and youth, Indigenous Peoples, and vulnerable groups and communities on the front lines of the climate crisis and climate action.[lxxii]

Instead of carbon markets, introduce strong state regulations to limit greenhouse gas emissions and reduce production, especially in Global North economies.

Recomendation 3.

Supporting a global just transition

Global North countries must commit to providing real additional funding for Global South countries to ensure a just transition towards decarbonized economies. This can be done by redirecting fossil fuel subsidies to these countries, cancelling unfair sovereign debts, and taxing polluters and the super-rich.

Just Transition Plans should recognize care work as an essential requirement for transiting societies towards low-carbon economies, and should offer policies to eliminate existing gender inequities.

Funding and investment in the care economy is required to build more climate resilience for communities to adapt to the climate emergency.

The current energy crisis in Global South countries must not be solved by supporting the exploitation of fossil fuels.

The measures adopted at COP30 must not undermine the fundamental rights and livelihoods of communities in Global South countries. Land—including the territories of Indigenous Peoples, agricultural land, and forests—must be excluded from Article 6.4 of the Paris Agreement.

The implementation of Article 6.4 must adopt rules and procedures that are compatible with a just, equitable and sustainable transition, and in line with international standards and best practices regarding Indigenous Peoples' right to free, prior and informed consent, participation, and access to information—including environmental information.

Recomendation 4.

Reparations: Claiming climate, colonial and reproductive debts for just climate policies

Recognize the climate debt—defined as the historical and moral responsibility of those who caused the climate crisis—to make reparations and amends for harms done to the affected countries and their peoples.

Repay and repair the debt owed by countries in the Global North to countries in the Global South, which was built up during the colonial past and is further exacerbated by neocolonial dynamics.

Recognize reproductive debts, taking into account care, intergenerational, cultural and social costs of the climate crisis, which are mostly invisible and borne by women.

Acknowledge these invisible debts in spaces like the COP and develop methodologies to implement reparations in UNFCCC climate policies. Governments from the Global North—like Spain—that claim to be the champions of combating climate change and inequalities should be the first to take a step forward.

Beyond COP30, advancing systemic reforms

Reforming the international financial architecture and overhauling the debt system are absolute priorities for redressing injustices related to the climate emergency. States should support the call for a UN Framework Convention on sovereign debt, which should be negotiated and agreed upon by all UN member states in an equitable, inclusive, participatory, accountable and transparent manner. A UN Debt Convention should embody:[lxxiii]

A fair and transparent multilateral sovereign debt resolution mechanism, in order to deliver on sufficient debt restructuring and cancellation so that borrowing countries can fulfil their international human rights obligations, achieve development goals, ensure gender equality, and implement necessary climate actions.

Principles of responsible sovereign lending and borrowing, and promote legislation—both in lender and borrower countries—that mandates transparent and fair governance and management of sovereign debts.

A new approach to debt sustainability frameworks and analyses (DSAs),[5] ensuring that the assessment is aligned with human rights, climate and sustainable development needs, including ex-post and ex-ante gender, human rights, and environmental impact assessments and audits to identify illegitimate debts.

An automatic debt service cancellation mechanism that protects Global South countries from extreme climate, environmental, economic, health, food and security shocks, and a promotion of debt contract clauses that provide for sharing the risks of climate-related and other external shocks between lenders and borrowers.

A binding global debt registry to promote transparency.

5 IMF's Debt Sustainability Analysis (DSA), the global benchmark for assessing sovereign debt risks, critically fails to account for the costs of climate resilience and sustainable development. As a result, many African economies appear economically "sustainable" on paper—until a crisis erupts. Thus, a recent study using an enhanced DSA methodology (building on the IMF's Low-Income Country Debt Sustainability Framework) that incorporates climate and Sustainable Development Goals (SDG) spending, reveals that "by 2023, 15 African economies had already breached solvency thresholds. By 2029, all but Burkina Faso and Uganda are projected to exceed them if necessary climate and development investments are included." According to this study, Madagascar breached its solvency threshold during this year, 2025.

To conclude, this is not simply a matter of contributing financially through climate finance as a form of restitution/reparations; it is also about adopting a decolonial approach linking debt relief to climate and development goals, helping Global South countries escape the debt-climate trap, setting the stage for a more sustainable and just global financial system, and systemic reforms that can help to break the vicious cycle of debt and climate vulnerability in the Global South, freeing up resources for essential public services and just transitions. In this sense, climate solutions must tackle the systemic issues. Otherwise, false solutions and mechanisms that are ingrained in the financial capitalist system that benefit a few at the cost of many will be perpetuated. At COP30, governments should commit to bold and transformative political climate solutions to overcome the multiple challenges and take a step forward towards centring people's lives and the planet's wellbeing.

In solidarity with Gaza

UNFCCC sessions cannot exist in isolation. While these spaces are dedicated to advancing climate action, they are inextricably linked to broader struggles for human rights and the prevention of atrocities. State parties, like many European countries, cannot claim to champion climate justice while remaining silent in the face of a genocide unfolding in real time. Climate justice is meaningless if it is not rooted in the protection of human dignity and life.

Image 8:
Bako Harry Rakotondratompo.
Pexels

Reference List

i Sherfinski, David (2025). *Trump's team weighs COP attendance, but influence looms either way.* Available online: https://www.context.news/climate-risks/trumps-team-weighs-cop-attendance-but-influence-looms-either-way.

ii World Meteorological Organization, press release (October 2025). *Carbon dioxide levels increase by record amount to new highs in 2024.* Available online: https://wmo.int/news/media-centre/carbon-dioxide-levels-increase-record-amount-new-highs-2024.

iii UNCTAD (2025). *A world of debt. Report 2025.* Available online: https://unctad.org/publication/world-of-debt.

iv Erlassjahr.de (2024). *Global Sovereign Debt Monitor 2024.* Available online: https://erlassjahr.de/wordpress/wp-content/uploads/2024/04/GSDM24-online.pdf.

v International Monetary Fund (2025). *Fiscal Policy under Uncertainty. Report April 2025*. Available online: https://www.imf.org/en/Publications/FM/Issues/2025/04/23/fiscal-monitor-April-2025.

vi See UNCTAD (2025).

vii ActionAid (2021). *The public versus austerity: Why public sector wage bill constraints must end.* Available online: https://actionaid.org/publications/2021/public-versus-austerity-why-public-sector-wage-bill-constraints-must-end?msclkid=30a59d97a92411ecba815418a74cd1e4#downloads.

viii Fresnillo, Iolanda (2020). *A tale of two emergencies - the interplay of sovereign debt and climate crises in the global south.* EURODAD. Available online: https://www.eurodad.org/a_tale_of_two_emergencies_the_interplay_of_sovereign_debt_and_climate_crises_in_the_global_south.

ix ActionAid (2023). *The Vicious Cycle: Connections Between the Debt Crisis and Climate Crisis.* Available online: https://actionaid.org/sites/default/files/publications/The_vicious_cycle.pdf.

x Republic of Madagascar (2016). *Madagascar Intended Nationally Determined Contribution.* Available online: https://unfccc.int/sites/default/files/NDC/2022-06/Madagascar%20INDC%20....

xi Fresnillo, Iolanda and Crotti, Ilaria (2022). *Small Island Developing States drowning in debt and climate emergencies.* Available online: https://www.eurodad.org/small_island_developing_states_drowning_in_debt_and_climate_emergencies.

xii Pérez, Alfons (2021). *Green deals in a time of pandemics. The future will be*

contested now. Observatori del Deute en la Globalització (ODG). Available online: https://odg.cat/en/publication/green-deals-pandemics/.

xiii See Pérez (2021).

xiv Custodio, Clàudia (2025). *Neocolonialism in the name of the green transitions.* Observatori del Deute en la Globalització (ODG). Available online: https://odg.cat/wp-content/uploads/2025/02/NeocolonialismGreenTransition_ENG.pdf.

xv See Custodio (2025).

xvi Erlassjahr.de (2024). *Global Sovereign Debt Monitor 2024.* Available online: https://erlassjahr.de/wordpress/wp-content/uploads/2024/04/GSDM24-online.pdf.

xvii Dengler, Corinna (2025, accepted/in press). *Invisible Debts: A Feminist Ecological Economics Approach to Debts from Below. Feminist Economics*.

xviii Haiven, Max (2020). *Revenge Capitalism: The Ghosts of Empire, the Demons of Capital, and the Settling of Unpayable Debts.* Pluto Press, London.

xix See Haiven (2020).

xx Observatori del Deute en la Globalització (2003). *Deuda ecológica ¿Quién debe a quién?* ICARIA editorial, Barcelona.

xxi Fanning, Andrew and Hickel, Jason (2023). "Compensation for atmospheric appropriation". *Nature Sustainability* volume 6, pages 1077–1086 (2023). Available online: https://www.nature.com/articles/s41893-023-01130-8.pdf.

xxii Debt Justice (2022). *Colonialism and debt. How debt is used to exploit and control.* Available online: https://debtjustice.org.uk/wp-content/uploads/2022/08/Colonialism-and-Debt-briefing.pdf.

xxiii Illumination (2023). *Haiti's Debt to France.* Available online: https://medium.com/illumination/haitis-debt-to-france-338bdab8dfa8.

xxiv Alexander Nahum Sack (1927). *Les effets des transformations des États sur leurs dettes publiques et autres obligations financières* (translated as *The Effects of State Transformations on Their Public Debts and Other Financial Obligations*). Available online in French: https://www.cadtm.org/IMG/pdf/Alexander_Sack_DETTE_ODIEUSE.pdf.

xxv International Labour Organization (2018). *Care Work and Care Jobs for the Future of Decent Work.* Geneva: ILO. Available online: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40dgreports/%40dcomm/%40publ/documents/publication/wcms_633135.pdf.

xxvi Pérez Orozco, Amaia (2014). *Subversión feminista de la economía* (translated as *Feminist subversion of the economy*). Traficantes de sueños, Madrid.

xxvii Akbulut, Bengi (2023) "A Feminist Degrowth" in Corinna Braun-Munzinger and Patrick Zuell, eds. *Beyond Growth? Alternative Models for Economic Development,* 26–37. Bonn: GIZ. Available online: https://www.giz.de/expertise/downloads/giz2023-en-BGR-7-chapter.pdf.

xxviii World Bank Group (2025). *Madagascar Poverty and Equity Brief*. Available online: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099703304212517450.

xxix IFAD (2025). *Madagascar*. Available online: https://www.ifad.org/en/w/countries/madagascar.

xxx Colby College (1996). *History and Current Crisis of Deforestation (Madagascar)*, reviewed by Alane O'Connor. Available online: https://personal.colby.edu/personal/t/thtieten/defor-mad.html.

xxxi Jubilee Debt Campaign (2020). *Guide to understanding and accessing debt information.* Available online: https://debtjustice.org.uk/wp-content/uploads/2020/08/Guide-to-debt_English_08.20.pdf.

xxxii EURODAD (2024). *UN framework convention on sovereign debt. Building a new debt architecture for economic justice.* Available online: https://assets.nationbuilder.com/eurodad/pages/4688/attachments/original/1729260399/01_debt-architecture-briefing-EN-oct18.pdf?1729260399.

xxxiii Civil Society FfD Group (2021). *Submission to the UN Independent Expert on foreign debt and human rights on "International debt architecture reform and human rights".* Available online: https://www.ohchr.org/sites/default/files/Documents/Issues/IEDebt/Int-debt-architecture-reform/Civil-Society-FfD-group-input-IDAreform-EN.pdf.

xxxiv African Union (2025). *Declaration of the African Union Conference on debt (Lomo, Togo).* Available online: https://au.int/sites/default/files/documents/44785-doc-EN_Draft_Zero_Declaration_AU_Conference_on_Debt_Final.pdf.

xxxv Initiative for Policy Dialogue (2025). *Executive Summary of The Jubilee Report.* Available online: https://ipdcolumbia.org/wp-content/uploads/2025/08/Executive-Summary-of-Jubilee-Report.pdf.

xxxvi African Leaders Debt Relief Initiative (2025). *The Cape Town Declaration*. Available online: https://www.tralac.org/documents/resources/external-relations/g20/5834-the-african-leaders-debt-relief-initiative-cape-town-declaration-27-february-2025/file.html.

xxxvii Direction générale du Trésor Public Malagasy (2025). *Bulletin statistique de la dette.*

xxxviii See IMF (2025).

xxxix See IMF (2025).

xl See IMF (2025). Table 11. Madagascar: Projected External Borrowing Program, on a Contractual Basis.

xli See IMF (2025).

xlii World Bank (2024). *Madagascar Gender Assessment: Understanding the Challenges and Opportunities for Greater Empowerment of Women and Girls in Madagascar.* Available online: https://www.worldbank.org/en/country/madagascar/publication/madagascar-afe-gender-assessment.

xliii Chiponda, Melania and Songonle, Anne (2023). *A Feminist Analysis of the Triple Crisis: Climate Change, Debt, and COVID-19 in Zimbabwe and Kenya.* Feminist Action Nexus for Economic and Climate Justice. Available online: https://wedo.org/wp-content/uploads/2023/07/ActionNexus_TripleCrisisBrief_EN.pdf.

xliv Government of the Republic of Madagascar (2024). *Madagascar's Intended Nationally Determined Contribution.* Available online: https://unfccc.int/sites/default/files/NDC/2022-06/Madagascar%20INDC%20Eng.pdf.

xlv International Monetary Fund (2022). *Republic of Madagascar: Rapport D'assistance Technique—Programme D'évaluation Macroéconomique Du Climat.* IMF Country Report N°22/342. Available online: https://www.imf.org/en/Publications/CR/Issues/2022/11/14/Republic-of-Madagascar-Technical-Assistance-Report-Climate-Macroeconomic-Assessment-Program-525665

xlvi Action Aid, APMDD, Christian Aid, Climate and Community Institute, Debt Justice, Latindad, MenaFem (2024). *Briefing: Debt Swaps won't save us: The urgent need for debt cancellation and grant-based climate finance.* Available online: https://actionaid.org/publications/2024/debt-swaps-wont-save-us-urgent-need-debt-cancellation-and-grant-based-climate.

xlvii Debt Justice (2023). *Lower income country debt payments to hit highest level in 25 years.* Available online: https://debtjustice.org.uk/press-release/lower-income-country-debt-payments-set-to-hit-highest-level-in-25-years.

xlviii Oxfam International (2025). *Climate Finance Shadow Report 2025. Analysis progress on climate finance under the Paris Agreement.* Available online: https://oxfam.app.box.com/s/m9iyzfrygsgr16tm8od7y4jtnjujqu6h.

xlix For example, Fresnillo, Iolanda (2023). *Miracle or mirage: are debt swaps really a silver bullet?* Available online https://assets.nationbuilder.com/eurodad/pages/3225/attachments/original/1701693052/debt-swaps-report-final-dec04.pdf?1701693052.

l Ecofin Agency (2024). *Five African Nations Set for World's First Joint Debt-for-*

Nature Swap. Available online: https://www.ecofinagency.com/finance/0110-45956-five-african-nations-set-for-world-s-first-joint-debt-for-nature-swap.

li 2424.MG (2025). *Rindra Rabarinirinarison plaide pour l'annulation de dettes en s'engageant à les convertir en des programmes d'adaptation aux changements climatiques.* Available online: https://2424.mg/rindra-rabarinirinarison-plaide-pour-lannulation-de-dettes-en-sengageant-a-les-convertir-en-des-programmes-dadaptation-aux-changements-climatiques/.

lii World Wild Fund (2003). *Madagascar's experience with swapping debt for the environment. Debt-for-Nature Swaps and Heavily Indebted Poor Country (HIPC) Debt Relief.* Available online: https://www.cbd.int/financial/debtnature/madagascar-debtdev.pdf.

liii SOMO (2024). *Facing the facts: carbon offsets unmasked. A series of articles debunking the most frequently used corporate myths about carbon offsets.* Available online: https://www.somo.nl/facing-the-facts-carbon-offsets-unmasked/

liv UN environment programme (2025). *Carbon Markets.* Available online: https://www.unep.org/topics/climate-action/climate-finance/carbon-markets.

lv World Bank (2024). *Global Carbon Pricing Revenues Top a Record $100 Billion.* Available online: https://www.worldbank.org/en/news/press-release/2024/05/21/global-carbon-pricing-revenues-top-a-record-100-billion.

lvi See SOMO (2024).

lvii Guizar-Coutiño, Alejandro; P. G. Jones, Julia; Balmford, Andrew; Carmenta, Rachel and Coomes, David A. (2022). *A global evaluation of the effectiveness of voluntary REDD+ projects at reducing deforestation and degradation in the moist tropics.* Society for Conservation Biology. Available online: https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/cobi.1397.

lviii Human Rights Watch (2024). *Carbon Offsetting's Casualties. Violations of Chong Indigenous People's Rights in Cambodia's Southern Cardamom REDD+ Project.* Available online: https://www.hrw.org/report/2024/02/29/carbon-offsettings-casualties/violations-chong-indigenous-peoples-rights.

lix Lang, Miriam, Manahan, Mary Ann and Bringel, Breno (2024). *The Geopolitics of Green Colonialism. Global Justice and Ecosocial Transitions.* Pluto Press, London. Available online: https://www.plutobooks.com/product/the-geopolitics-of-green-colonialism/.

lx Lyons, Kriston and Westoby, Peter (2014). *Carbon colonialism and the new land grab: Plantation forestry in Uganda and its livelihood impacts.* Journal of Rural Studies 36:13–21. Available online: https://www.researchgate.net/publication/263892703_Carbon_colonialism_and_the_new_land_grab_Plantation_forestry_in_Uganda_and_its_livelihood_impacts.

lxi Youth Network for Sustainable Development (YNSD) and CRAAD-OI (2023). *Rapport d'enquête relatif a l'évaluation du programme pilote REDD+ «Ati Ala Atsinanana». Communes rurales du district de Brickaville: Ambohimanana, Maroseranana, Fetraomby*. Unpublished report.

lxii Brimont, Laura and Leroy, Maya (2018). *Le mécanisme REDD+ et les projets pilotes à Madagascar : d'un idéal incitatif à la réalité des dispositifs de gestion*. In Natures Sciences Sociétés 2018/3 (Vol. 26), pages 308-319. Éditions EDP Sciences. Available online: https://www.nss-journal.org/articles/nss/full_html/2018/03/nss180043/nss180043.html.

lxiii See Brimont L. and Leroy M. (2018).

lxiv Randriamaro, Zo (2004). *Ecofeminist Costs Analysis of the Climate Crisis in Toliara. Case study report*. WoMin and CRAAD-OI. Available online: https://craadoimada.com/ecofeminist-costs-analysis-of-the-climate-crisis-in-toliara-study-report/.

lxv Williams, Fiona (2024). *Centring Reparation, Intersectionality and Interdependence in Feminist Climate Justice. Feminist Climate Justice Think Pieces No. 1.* UN WOMAN. Available online: https://www.unwomen.org/sites/default/files/2024-10/feminist-climate-justice-think-pieces-01-reparation-intersectionality-and-interdependence-en.pdf.

lxvi UNFCCC (2025). *Draft conclusions on SBSTA agenda item 8 / SBI 62 agenda item 8. United Arab Emirates just transition work programme. Version 25/6/2025.* Available online: https://unfccc.int/sites/default/files/resource/JTWP_dt_sb62_01.pdf.

lxvii European Commission (2021). *The Just Transition Mechanism: making sure no one is left behind.* Available online: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism_en.

lxviii Bregolat, Joana (2021). *Green Deals: where is the global justice? Policy Proposals for Global and Internationalist Green Deals.* Observatori del Deute en la Globalització (ODG). Available online: https://odg.cat/wp-content/uploads/2021/11/Global_Green_New_Deals.pdf.

lxix Zaehringer et al. (2024). *How are large-scale extractive industries affecting progress toward the sustainable development goals in Madagascar? Perceived social-ecological impacts of mining investments.* Available online: https://www.sciencedirect.com/science/article/pii/S2666049024000173.

lxx See Zaehringer et al. (2024).

lxxi World Health Organization (2015). *Madagascar Data.* Available online: https://data.who.int/countries/450.

lxxii WoMin (2024). *Building the Right to Say NO to safeguard women's rights to land and natural resources in East Africa.* Available online: https://womin.africa/wp-content/uploads/2025/06/Building-the-R2SayNO-in-East-Africa-FINAL-ENG-3.pdf.

lxxiii Civil Society Financing for Development Mechanism (2025). *Debt and debt sustainability. Civil Society FfD Mechanism Submission to FfD4 Elements Paper.* Available online: https://www.datocms-assets.com/120585/1734106991-debt-cs-ffd-mechanism-submission-to-ffd4-elements-paper.pdf