

OPPORTUNITIES FOR INCREASING FINANCING FOR SUSTAINABLE LANDSCAPES AND CLIMATE ADAPTATION IN MADAGASCAR

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OCTOBER 2019

USAID supports sustainable landscapes, biodiversity, and climate adaptation training and technical assistance, planning, financing, and implementation in Madagascar from impact investors and sustainable development funds



Photo credit: Eric Hyman, USAID

The Government of Madagascar has prepared a national plan for REDD+ financing to reduce deforestation and forest degradation and promote forest conservation, sustainable forest management, and enhancement of forest carbon stocks. It has also submitted forest reference level (baseline) data.⁴ The national REDD+ plan focuses on preserving the carbon-rich moist forests with the best prospects for carbon credits. However, it does not address the lower carbon dry and spiny forests that are home to many rare and endemic plant and animal species.



Photo credit: Eric Hyman, USAID

Madagascar, the world's fifth largest island, is a hotspot of unique and highly threatened biodiversity. Approximately 90 percent of its plant and animal species are endemic, existing nowhere else in the world. Madagascar lost 44 percent of its natural forest cover in the 60 years between 1953 and 2014. The deforestation rate increased to 1.1 percent per year between 2010 and 2014. Much of the remaining natural forest is highly fragmented, with 46 percent less than 100 meters from a cleared or open area. Natural forests now cover only 15 percent of the national territory. About 50 percent of the remaining area is tropical moist forest, 29 percent is dry forest, 19 percent is spiny forest, and 2 percent is mangroves. Madagascar also has an extensive area of coral reefs.¹

Madagascar has many development challenges: the poverty rate is 71 percent and illiteracy is 70 percent. The country has one of the highest risks of cyclones in Africa. Between 1980 and 2010, droughts, earthquakes, epidemics, floods, cyclones, and extreme temperatures caused more \$1 billion in economic damage. Shoreline erosion from sea level rise is already a significant problem for the coastal ports and beaches of Madagascar.² Its 3,000 miles of coastline and 250 islands are highly vulnerable to additional sea level rise from global warming.³

1 <https://doi.org/10.1016/j.biocon.2018.04.008>

2 <https://climateknowledgeportal.worldbank.org/country/madagascar>

3 <https://www.worldwildlife.org/places/madagascar>

4 <https://www.unredd.net/regions-and-countries/africa/madagascar.html>

Opportunities for Increasing Financing for Sustainable Landscapes and Climate Adaptation in Madagascar

The Government of Madagascar is preparing a National Adaptation Plan (NAP) to reduce the country's vulnerability to climate risks. USAID/Madagascar is providing assistance to support the NAP and has two activities to support conservation and communities in Madagascar: Mikajy and Hay Tao.

- The Mikajy Activity (Site-based Interventions for Biodiversity Conservation) works with local partners in targeted zones of high biodiversity value to help local communities improve their natural resource management practices, reducing threats to biodiversity and establishing the groundwork for more sustainable, climate-resilient economic development. Mikajy focuses on the landscapes and seascapes of MaMaBay and Menabe.
- The Hay Tao Activity (Knowledge Management for Biodiversity Conservation) is improving the information and enabling environment for community-based biodiversity conservation and sustainable development for natural resource-dependent communities. It also supports the site-specific conservation work of Mikajy.

In November 2018, the USAID/Washington-funded Climate Economic Analysis for Development, Investment, and Resilience (CEADIR) and USAID/Washington staff conducted a two-day training of trainers (ToT) workshop in Antananarivo for Hay Tao and Mikajy staff and their partners. The team trained participants on use of climate information and vulnerability assessments, identification of climate adaptation options, participatory methods for stakeholder engagement, private sector involvement in development and implementation of local adaptation plans, and the basics of cost-benefit and cost-effectiveness analysis for sustainable livelihoods in key value chains.

The following week, the ToT participants applied their learning by leading a regional workshop, "Climate Change Adaptation and Value Chains for Sava Region in Antalaha". This workshop engaged with local governmental, nongovernmental, and private sector stakeholders interested in sustainable landscapes and climate adaptation in four key value chains: ecotourism, fisheries, small livestock, and vanilla and clove production.

In November 2018, CEADIR and USAID/Washington staff also delivered a workshop on international public and private sector financing for climate change mitigation and adaptation for representatives of Hay Tao, Mikajy, the Government of Madagascar, and USAID/Madagascar. The climate financing workshop included two videos on



international development assistance and in-person presentations on scaling up financing for sustainable landscapes and climate adaptation and REDD+ financing.

Past international development assistance and private sector investment in Madagascar have been hindered by political instability and governance issues. Madagascar's high poverty rate, climate vulnerability, and unique terrestrial and marine biodiversity could help the country obtain new financing sources from impact investors and sustainable development funds.

This brief summarizes four key trends from the two November 2018 videos CEADIR prepared for the climate financing workshop in Madagascar. It also includes some updated information from 2018-2019.

INTERNATIONAL DEVELOPMENT ASSISTANCE FOR SUSTAINABLE LANDSCAPES AND CLIMATE ADAPTATION IS AVAILABLE FROM MULTIPLE SOURCES WITH DIFFERENT TERMS AND CONDITIONS—BUT RESOURCES ARE LIMITED.

International public sector finance development assistance resources for sustainable landscapes and climate adaptation sources are critical to address development and environmental goals, but are substantially lower than potential amounts from private sector investment. The Climate Policy Initiative (2018) reported that global public sector investment totaled \$436 billion for climate change mitigation and \$22 billion for adaptation finance was in 2015-2016.⁵ International development assistance funds depend on voluntary commitments by donor countries that vary over time and their approval process can be cumbersome and slow.^{6,7}

Sub-Saharan Africa received a relatively small portion of international public sector financing for climate change mitigation and adaptation, \$12 billion in 2016. The Green Climate Fund (GCF) has equal financing targets for climate mitigation and adaptation. It also allocates 50 percent of its climate adaptation funds to least developed countries, small island developing states, and sub-Saharan Africa. In 2016, the GCF committed \$18.5 million to a project that was expected to leverage private investment from the

5 <https://climatepolicyinitiative.org/wp-content/uploads/2018/11/Global-Climate-Finance--An-Updated-View-2018.pdf>

6 <https://www.germanclimatefinance.de/2018/10/12/climate-finance-germanys-2019-federal-budget-growing-gap/>

7 <https://www.greenclimate.fund/news/united-kingdom-pledges-to-double-contribution-to-green-climate-fund>; <https://www.greenclimate.fund/news/france-doubles-its-contribution-to-the-green-climate-fund>; <https://www.greenclimate.fund/news/canada-announces-contribution-to-green-climate-fund>

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Althelia Madagascar Fund, which is still in the design and fundraising phase. This fund will support climate-smart agriculture and renewable energy in the eastern part of the country. The GCF was also reviewing a \$60 million proposal to strengthen national meteorological services and early warning systems in Madagascar. Another public international financing source, the Adaptation Fund, had \$129 million in new pledges in 2018, but this was less than half of the \$264 million in new proposal requests it had received during the year.^{8,9} The Adaptation Fund recently approved \$14 million for building urban climate resilience in four African countries including Madagascar.¹⁰

Many low-income countries are highly vulnerable to climate change and have little capacity to adapt or respond to natural disasters and extreme weather. However, the Organisation for Economic Co-operation and Development found that only 7 percent of the \$81 billion in official development assistance for all developing countries went to the least developed countries in 2012–2015.¹¹ In mid-2019, the Global Environment Facility's Least Developed Countries Fund had only \$29.2 million available for climate adaptation support.¹² The Climate Policy Initiative (2018) identified barriers to accessing adaptation finance in developing countries and reviewed strategies to develop and expand adoption of adaptation products and services and reduce the risks of adaptation investments.¹³

MULTILATERAL DEVELOPMENT BANKS ARE SIGNIFICANT SOURCES OF PUBLIC FINANCE, FOR CLIMATE CHANGE MITIGATION AND ADAPTATION.

Multilateral development banks (MDBs) committed \$43 billion in climate-related finance for developing and emerging economies in 2018, an increase from \$35 billion in 2017. Overall, 65 percent of total MDB climate-related financing in 2018 was for mitigation, 22 percent for adaptation, and 13 percent for combined mitigation and

8 <https://www.adaptation-fund.org/adaptation-fund-year-in-review-2018-key-highlights-and-accomplishments/>.

9 The Adaptation Fund has been a leader in promoting a “direct access” modality allowing national entities to qualify for funds without an international organization.

10 <https://www.adaptation-fund.org/project/building-urban-climate-resilience-south-eastern-africa-madagascar-malawi-mozambique-union-comoros-2/>

11 https://assets.ctfassets.net/4c9qlwde6qy0/5lgNlxPLwVEmY-yIkAQWGES/18a7802e5765ae61fcd9da4d97890033/UNCDF_Blended_Finance_in_LDCs_report.pdf

12 https://fiftrustee.worldbank.org/content/dam/fif/funds/lcdf/SummaryStatusReports/LDCF_MR_05_19.pdf

13 https://www.international-climate-initiative.com/fileadmin/Dokumente/2019/20190225_Understanding-and-Increasing-Finance-for-Climate-Adaptation-in-Developing-Countries.pdf

adaptation purposes. The share of MDB climate-related financing for adaptation has been increasing, reflecting the trend in total international public financing. Sub-Saharan Africa received \$8.9 billion in climate-related financing in 2018, an increase over the \$5.7 billion in 2017. MDBs also helped leverage \$68 billion in climate-related financing in 2018 from other sources, for a total of \$111 billion.

In 2018, 29 percent of MDB financing for climate change mitigation was for renewable energy; 25 percent for energy efficiency; 18 percent for transport; 11 percent



Photo credit: Eric Hyman, USAID

for cross-cutting purposes; 8 percent for waste and wastewater; 8 percent for agriculture, forestry, and land use; and 1 percent for low-carbon technologies. Approximately 23 percent of adaptation financing was for cross-cutting purposes; 22 percent for energy, transport, the built environment, and infrastructure; 18 percent for water and wastewater; 17 percent for crop and food production; 13 percent for other agricultural and ecological resources; 5 percent for institutional capacity support; 1 percent for coastal and riverine; 1 percent for industry, manufacturing, and trade; and 1 percent for financial services.¹⁴

In January 2019, the World Bank announced an Action Plan on Climate Change Adaptation and Resilience.¹⁵ This plan aims to

- Boost direct financing for climate adaptation to \$50 billion for FY 2021-2025, more than double the total for FY 2015-2018, putting financing for adaptation on par with climate change mitigation;
- Help countries mainstream climate adaptation to

14 Joint Report of Multilateral Development Banks, Climate Finance 2018; <https://publications.iadb.org/en/2018-joint-report-multilateral-development-banks-climate-finance>

15 <http://documents.worldbank.org/curated/en/519821547481031999/The-World-Bank-Groups-Action-Plan-on-Climate-Change-Adaptation-and-Resilience-Managing-Risks-for-a-More-Resilient-Future.pdf>

PRIVATE SECTOR RECOMMENDATIONS FOR RENEWABLE ENERGY AUCTIONS IN THAILAND AND MALAYSIA

manage climate risks in all phases of policy planning, investment design, and implementation; and

- Develop a new rating system to increase incentives for investments in climate adaptation and resilience and improve tracking.¹⁶

BLENDED FINANCE AND CREATIVE FINANCING INSTRUMENTS CAN INCREASE THE EFFECTIVENESS OF PRIVATE SECTOR ENGAGEMENT.

Blended financing is a promising approach that uses international public financing strategically to leverage private investment, but this approach is still lagging in the least developed countries. Development assistance organizations and partner governments can support development of project pipelines for blended finance. For example, the GCF has funded the Climate Investor One partnership with the Netherlands Development Finance Company, FMO, to finance clean energy in developing countries. The GCF also funded the Transforming Financial Systems for Climate partnership with the Agence Française de Développement to increase climate-related financing for domestic banks in 17 countries^{17, 18}

The Global Innovation Lab has supported 35 innovative financing solutions that mobilized \$1.9 billion over five years.¹⁹ In 2019, the Global Innovation Lab for Climate Finance sponsored a competition to promote new financing approaches. The Economic Community of West African States proposed one of the winning projects, the West African Initiative for Climate Smart Agriculture. This blended finance fund supports concessional interest-rate loans for smallholder farmer organizations and agribusinesses adopting climate-smart practices. It also offers technical assistance and loan guarantees to local financial institutions providing these loans.

Other examples of blended climate-related financing in low-income countries include

- Weather-indexed insurance in Senegal supported by a GCF grant to the World Food Programme;²⁰
- Forest bonds issued by the International Finance Corporation (IFC) to reduce deforestation in Kenya;²¹ and
- Disaster risk insurance for drought victims in Mauritania, Niger and Senegal through African Risk Capacity (ARC) agency of the African Union.^{22,23}

OTHER COUNTRIES OFFER MODELS AND LESSONS FOR FINANCING SUSTAINABLE LANDSCAPES AND CLIMATE ADAPTATION IN MADAGASCAR.

There are many private sector business opportunities for climate change mitigation and adaptation in climate-smart agriculture, agribusinesses, water supply, weather observation technology, and disaster early warning systems. The IFC has promoted rust-resistant coffee varieties in Nicaragua and the Althelia Climate Fund has paid price premiums to cacao farmers in Peru who agreed not to clear natural forests for cacao tree planting^{24,25}

To increase private sector investment in low-income countries, governments will need to provide a favorable policy and regulatory environment, political stability, develop infrastructure and renewable energy, and help to mitigate risks. National governments have formed successful partnerships with international organizations. One example is the Government of Uganda's collaboration with the New Climate Economy, a global partnership of research organizations, to develop and fund its green growth agenda.²⁶ Implementation of Uganda's green growth agenda will require an additional annual investment of \$450 million, including \$250 million from private sources and \$200 million from public sources.

20 https://unfccc.int/sites/default/files/alaskary_additional_resources_payouts_and_successes.pdf

21 https://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/about+ifc_new/investor+relations/ir-products/forest_bonds

22 <https://www.preventionweb.net/news/view/67119>

23 <http://www.africanriskcapacity.org>

24 https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/coffee-rust

25 <https://unfccc.int/climate-action/momentum-for-change/financing-for-climate-friendly/deforestation-free-cocoa>

26 <http://newclimateeconomy.report/workingpapers/wp-content/uploads/sites/5/2016/11/Ugandas-development-ambition.pdf>

16 The new system will be piloted over FY19-20 with an anticipated roll-out to projects in relevant sectors by FY21.

17 <https://www.climatefinancelab.org/project/fmo-climate-development-finance-facility/>

18 <https://www.afd.fr/en/afd-group-largest-program-partnership-green-climate-fund-increase-climate-financing-local-financial-institutions>

19 http://www.climatefinancelab.org/wp-content/uploads/2017/09/The-Lab_2019-Impact-Report.pdf