Financing inclusive investment in low carbon climate resilient development

The national climate finance landscape in Ethiopia and Rwanda

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International and national policymakers are promoting investment in low carbon climate resilient development (LCCRD) to address the challenges and opportunities provided by climate change. Ethiopia and Rwanda are two of several countries that are investing in an LCCRD pathway. The investment is expected to achieve, protect and enhance development gains made by households and the economy in the context of escalating climate change impacts. Policymakers will need to identify policy options to mobilise and deliver appropriate finance to support investment in LCCRD, including: scaled up finance to support the current and projected cost of LCCRD investments, long-term finance to sustain and incentivise investment in LCCRD, and flexible and accessible finance to enable the most vulnerable to invest in LCCRD.

By showing how policy actors in Ethiopia and Rwanda are shaping investment in LCCRD the paper identifies ways in which policymakers can establish coalitions to mobilise and deliver climate finance for inclusive investment in LCCRD. This paper is based on a political economy analysis of stakeholder choices vis-à-vis climate finance. It outlines the financial intermediaries, financial instruments and financial planning systems, which are used to access and allocate different sources of climate finance.

Contents

Acronyms

CI	Coffee initiative
CRGE	Climate Resilient Green Economy
DRR	Disaster risk reduction
DFID	Department of International Development
EDPRS	Economic Development and Poverty Reduction Strategies
FDRE	Federal Democratic Republic of Ehtiopia
FONERWA	National Environment and Climate Change Fund
FTI	Fast track initiative
GoR	Government of Rwanda
GTP	Growth and Transformation Plan
LCCRD	Low carbon climate resilient development
MEF	Ministry of Environment and Forest (Ethiopia)
MoFED	Ministry of Finance and Economic Development (Ethiopia)
NPC	National Planning Commission (Ethiopia)
NIB	Nib International Bank
NSCCLCD	National Strategy on Climate Change and Low Carbon Development
ODA	Overseas development assistance
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
OECD-DAC	Organisation for Economic Co-operation and Development - Development Assistance Committee
TRAP	Thematic Reduction Action Plan
SRAP	Sector Reduction Action Plan
SRM	Sector Reduction Mechanism
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

Summary

International and national policymakers are promoting investment in low carbon climate resilient development (LCCRD) to address the challenges and opportunities provided by climate change. Ethiopia and Rwanda are two of several countries that are investing in an LCCRD pathway. The investment is expected to achieve, protect and enhance development gains made by households and the economy in the context of escalating climate change impacts.

Policymakers will need to identify policy options to mobilise and deliver appropriate finance to support investment in LCCRD, including: scaled up finance to support the current and projected cost of LCCRD investments, long-term finance to sustain and incentivise investment in LCCRD, and flexible and accessible finance to enable the most vulnerable to invest in LCCRD.

Framing and implementing policy options to finance investment in LCCRD is complex. The current flows of climate finance do not meet investment costs and timeframes of LCCRD investments; they are not easily accessible to the most vulnerable countries and communities. Investment decisions need to evolve constantly in response to climate-induced uncertainty, which necessitates the adoption of iterative and learning-by-doing approaches to identify and manage options. Finally, multiple international and national policy actors are shaping policy options: effective engagement and coordination between these actors is required to mobilise and deliver finance for inclusive investment in LCCRD.

A political economy analysis of actors and their decisions in the national climate finance landscape in Ethiopia and Rwanda has revealed emerging policy options, as well as coalitions, which encourage investment in LCCRD. These options fall into two broad categories: a single-pronged approach to resource mobilisation and delivery and a multi-pronged approach to resource mobilisation and delivery. Both approaches have their own comparative advantages for resource mobilisation and delivery.

Actors tend to cluster behind either approach in accordance with their policy mandates and capacities. The emerging clusters are aligned in their interest to promote LCCRD but are yet to evolve into a strategic coalition based on joint action since policy actors lack coordination between themselves.

Better coordination between policy actors can create a shared understanding and synergy between policy options – resulting in better resource mobilisation and delivery of climate finance for inclusive investment in LCCRD. A political economy analysis will enable policymakers to improve coordination by identifying areas of convergence between policy options.

1

Introduction

International and national policymakers are promoting investment in low carbon climate resilient development (LCCRD) to address the challenges and opportunities provided by climate change. This investment is expected to achieve, protect and enhance development gains made by households and the economy in the context of escalating climate change impacts.

Ethiopia and Rwanda are two of the first countries in Africa, which have adopted an LCCRD pathway to achieve their development objectives (Fisher *et al.* 2014). In Ethiopia the Climate Resilient Green Economy (CRGE) Strategy outlines a pathway to achieve middle-income status by 2025 in a carbon neutral and climate resilient way. The strategy aims to transform development planning, investments and development outcomes (Fikreyesus *et al.* 2014). In Rwanda the National Strategy on Climate Change and Low Carbon Development (NSCCLCD) aims to integrate climate change adaptation and mitigation into the country's development agenda. The strategy will enable Rwanda to achieve a developed, low carbon and climate resilient economy by 2050. In both countries an LCCRD pathway is expected to deliver opportunities for inclusive and sustainable development.

Finance will play a key role in implementing an LCCRD pathway. This will entail mobilising the scale of finance required to meet the costs and timeframes of LCCRD investments and delivering finance to those who need it most so that they can shape, and benefit from, LCCRD investments. To give an idea of scale, it is anticipated that Ethiopia will require approximately US$150 billion for investment in CRGE initiatives over the next 10 years.

Current flows of finance for inclusive investment in LCCRD are inadequate[1] (Rai *et al.* 2015, OECD 2014, Buchner *et al.* 2014). In 2014, an estimated US$61.8 billion of public and private climate finance was mobilised by developed countries for developing countries (OECD 2015). This sum falls short of the current demand for climate finance. In addition, current flows of climate finance are dominated by short-term sources of private finance, which are mostly invested in the country of origin with the aim of securing an economic return on investment (UNEP 2015). As such, many of the least developed countries and poor and small-scale investors within these countries lack access to both scaled-up and long-term finance for LCCRD (Kaur 2015) (See Table 7 for details on global flows of climate finance).

Multiple international and national policy actors shape options to finance investment in LCCRD. They identify financial intermediaries responsible for mobilising and delivering finance. For instance, government agencies in Ethiopia and Rwanda are exploring ways to work with national financial institutions to mobilise and deliver finance to small-scale LCCRD investors (Rai *et al.* 2015,

[1] Climate finance refers to international and national, public and private sources of finance for investment in LCCRD initiatives (Rai *et al.* 2015).

Steinbach *et al.* 2015, Kaur 2016). Actors are using a range of financial management systems to govern the flow of finance for LCCRD. For instance, government agencies in Ethiopia and Rwanda plan to use public finance management systems[2] to manage and allocate climate finance for investment in pro-poor public goods. And finally, actors are deploying a range of financial instruments from grants to equity and debt finance to incentivise investment in LCCRD. Each of these options has specific outcomes in terms of channelling finance to the most poor for investment in LCCRD.

It is crucial that policymakers work with all actors to improve coordination and complementarity between options to mobilise and deliver finance for inclusive investment in LCCRD. Establishing coalitions, which unite diverse actors in support of a common cause is one way of achieving better coordination and complementarity between options (UNEP 2015, Schmitz and Scoones 2015).

By showing how policy actors in Ethiopia and Rwanda are shaping investment in LCCRD the paper identifies ways in which policymakers can establish coalitions to mobilise and deliver climate finance for inclusive investment in LCCRD.

The paper is based on a political economy analysis of stakeholder choices vis-à-vis climate finance. It outlines the financial intermediaries, financial instruments and financial planning systems, which are used to access and allocate different sources of climate finance.

The study is innovative in its use of a comparative approach to understanding the financial element of climate-resilient planning while also focusing on policy storylines and knowledge. It will contribute to furthering the understanding of the political economy of climate-resilient planning within least developed countries.

The study adds to existing literature on the subject (Tanner and Allouche 2011), which includes existing texts have explored particular country cases such as Bangladesh (Alam *et al.* 2011) and Nepal (Ayers *et al.* 2011), and programmes such as the Climate Investment Funds (Rai *et al.* 2015).

[2] Public finance management refers to the "way governments manage public resources (both revenue and expenditure) and the immediate and medium-to-long-term impact of such resources on the economy or society. As such, PFM has to do with both process (how governments manage) and results (short, medium, and long term implications of financial flows)" (Andrews et al 2014). PFM systems refer to all elements of the budget and expenditure cycle, from planning to audit (CABRI, 2009: Putting Aid on Budget: Good Practice Note).

2

Approach and methodology

Conceptual framework: the climate finance landscape framework

The study uses the climate finance landscape framework to understand the policy options, which are being identified by policymakers in Ethiopia and Rwanda to mobilise and deliver finance for inclusive investment in LCCRD. The climate finance landscape framework focuses on how financial intermediaries, financial instruments and financial planning systems can be designed to enhance the flow of climate finance from its source to its end use.

Analytical framework: political economy analysis

The study is based on a political economy analysis of stakeholder choices within the national climate finance landscape. Political economy analysis acknowledges that different actors have different knowledge that is shaped by discourses, narratives and values, and that their decisions are influenced by different incentive structures (Tanner & Allouche, 2011). These underlying factors shape the choices actors make in designing the national financial landscape to mobilise, manage and deliver finance for inclusive investment in LCCRD. The combination of these three political economy factors – actors, knowledge and incentives – leads to decisions. The study aims to build actor coalitions behind policy choices that will enhance financial flows for inclusive investment in LCCRD.

Research methods

Case Study

The research is based on a case study of the national climate finance landscape emerging in Ethiopia and Rwanda.

The governments of Ethiopia and Rwanda have established LCCRD policy frameworks and have established financial mechanisms to mobilise, manage and allocate climate finance for investment in LCCRD. As such they represent key cases of how policy actors are designing the national climate finance landscape to access and manage climate finance in ways that unlock long-term and flexible finance at scale in support of investment in LCCRD.

Figure 1: Climate finance landscape framework

FLOW OF CLIMATE FINANCE

SOURCES OF CLIMATE FINANCE	FINANCIAL INTERMEDIARIES	FINANCIAL INSTRUMENTS	FINANCIAL PLANNING SYSTEMS	USES AND USERS OF CLIMATE FINANCE
• International and national public finance • International and national private finance • Carbon finance	• Bilateral and multilateral agencies • National agencies • Development Finance Institutions • Private finance institutions • Multilateral, bilateral and national climate funds	• Finance Enhancing Instruments • Risk Management Instruments (guarantees and insurance) • Grants • Concessional loans • Capital (equity and debts)	• Fiscal policy • Financial management systems • Institutional arrangements	• **Types of action:** adaptation, mitigation, resilience, green economy • **Types of access:** private sector, public sector, civil society organisations

INSTRUMENTS FOR MOBILISING, MANAGING AND DISBURSING CLIMATE FINANCE

The climate finance landscape framework supports policymakers in tracking and assessing how the design of financial intermediaries, instruments and planning systems can enhance the flow of climate finance from its source to its end use.

An explanation of the pillars in the financial landscape follows:

Sources of climate finance refer to the *origin* of climate finance (international or national) and to the *type* of climate finance (long- and/or short-term public and/or private and/or carbon finance).

Uses of climate finance refer to the types of investment targeted by climate finance (adaptation, mitigation). **Users of climate finance** refer to the type of investors targeted by climate finance (public, private, civil society).

Financial Intermediaries refer to the institutions that enable the flow of climate finance from its source to the end use/users. Intermediaries play a role in mobilising and disbursing climate finance.

Economic and financial instruments provide incentives for climate relevant investments. *Economic instruments* (which include policy and regulatory frameworks) affect producers' and consumers' behaviour by causing changes in prices. A *financial instrument* is any contract that gives one entity a financial asset and another a financial liability. Financial instruments that incentivise LCCRD investments include risk management instruments like guarantees and insurance, grants, concessional loans, and capital instruments of equity and debt finance. Different instruments will suit different investment needs.

Financial planning systems play a key role in the management and governance of climate finance. Financial planning systems include public finance management systems, development and commercial finance management systems and private sector management systems. Financial management systems co-relate to the financial intermediary used to mobilise and deliver finance for investment in LCCRD. Key elements of financial planning systems include policies, institutional arrangements and financial management systems.

Source: Kaur et al (2014).

Data collection and analysis methods

The study was conducted from March 2013 to March 2014. Data was collected by reviewing relevant policy documents (see Table 8 in Annex I) and by conducting semi-structured interviews with key policymakers who are shaping the national climate finance landscape in Ethiopia and Rwanda (see Table 10 in Annex II).

An action-learning approach to data collection and analysis was applied. During the study we conducted national level meetings with action-learning partners, one national dialogue with broader stakeholders, and one cross-country dialogue between policy actors from Bangladesh, Ethiopia, Cambodia, Kenya, Rwanda, Nepal, The Gambia and Zanzibar.

We analysed the policies and interview data using a Hajerian policy storyline framework to understand how coalitions are forming around options to finance LCCRD.

Limitations

The study has been conducted as an exploratory one, and there are necessarily limitations at this stage. The interviews and surveys were conducted with select policymakers who had been identified through purposive sampling to cover the key institutions and actors. However, due to issues of access and availability, we could not cover all actors. This means that the analysis covers a range of ideas but cannot claim to represent all views. Policy responses to address climate change evolve fast and new developments have been announced since the interviews and surveys took place. We have tried to reflect these where possible.

The research does not offer a full political economy analysis. As mentioned the researchers focused on understanding the actors and the choices that shape the national climate finance landscape. The second phase of the research (2015–16) will focus on understanding the incentives that shape policy choices. The research has not emphasised the power dimension of a political economy analysis because we have taken an internal political economy approach (Harris and Booth 2013, Copestake and Williams 2012).

3

Framing options: understanding the investment landscape for low carbon climate resilient development in Ethiopia and Rwanda

Introduction

In order to frame options to mobilise and deliver appropriate finance for investment in LCCRD, an understanding of the LCCRD investment landscape is required. This chapter outlines investment priorities and their financial needs. It then provides a digest of the extent to which current flows of climate finance meet LCCRD investment needs in Ethiopia and Rwanda.

Investment priorities

Investment priorities in Ethiopia and Rwanda are shaped by climate change policies and overarching national priorities and plans.

In Ethiopia, the Growth and Transformation Plan (GTP), the CRGE Vision, the green economy strategy and the climate resilient strategy guide low carbon, climate resilient investment priorities. The CRGE Vision provides policy direction to build a climate resilient green economy by the year 2025. The green economy strategy takes an economy-wide approach to achieving development goals whilst limiting greenhouse gas emissions in 2030 to current levels, which are estimated at 150MtCO2e (FDRE 2011). The climate resilient strategy takes a sectoral approach to prioritising investment in climate sensitive sectors. The government is currently developing guidelines that will integrate climate actions into Ethiopia's national development planning process guided by the GTP II. Guidance aimed at developing CRGE investment plans categorises investments into three types[3]:

Type 1 enabling activities: these interventions will aim to enable investment in CRGE

Type 2 mainstreaming activities: these interventions will aim to mainstream CRGE into regular development and economic investments, and

Type 3 investments: these interventions are in addition to mainstream development investments.

Investment priorities can also be ascertained by the fast track initiative (FTI). The FTI aims to start the implementation of CRGE initiatives in prioritised sectors. It also aims to test the financial management processes of the CRGE Facility to enable better management of financial resources. In January 2014 the management committee of the CRGE Facility allocated US$20.8 million to six core CRGE sectors to prepare and implement fast track investments. Each investment is expected to contribute to the triple objective of encouraging economic growth, reducing greenhouse gas emissions and building resilience to climate change. The size of the financial commitment allocated to each sector reflects the priority given to it. Sectors are expected to develop long-term strategic plans in line with the national development planning process based on lessons drawn from the implementation of FTIs. See Table 1 for a summary of CRGE investments and the associated costs in prioritised sectors (MoFED 2015)[4].

In Rwanda, investment in LCCRD is guided by the Economic Development and Poverty Reduction Strategies (EDPRS 1 and 2) and the National Strategy for Climate Change and Low Carbon Development (NSCCLD). The EDPRS provides policy direction to pursue a green approach to economic transformation. It encourages investment in sustainable cities and villages, and in green innovation in industry and the private sector. The NSCCLD provides policy direction to achieve a climate resilient, low carbon economy by 2050. It prioritises investment in low carbon energy supply, land use and water resource management, social protection, improved health, and disaster risk reduction (DRR).

FONERWA, the climate fund in Rwanda, provides guidance on the types of activities that can receive financial support. Finance is disbursed under four windows:

FONERWA financing window 1: conservation and management of natural resources: ecosystem rehabilitation, sustainable land management, integrated water resources management, sustainable forestry management, sustainable mines and quarries, and promotion and protection of biodiversity.

FONERWA financing window 2: research and development and transfer and implementation of technology: renewable energy and energy efficient technology, pollution management, water storage, conservation and irrigation technologies, applied and adaptive research (agroforestry, waste, urban planning), DRR, data collection and monitoring, and management information systems.

FONERWA financing window 3: environment and climate change mainstreaming: strategic environment and climate assessments, sector-specific adaptation and mitigation, and support for implementation of cross-sectoral integrated planning.

FONERWA financing window 4: environmental impact assessment and monitoring and evaluation: monitoring implementation of environment management plans for capital projects, and environmental auditing.

The public and private sectors and civil society are expected to invest in LCCRD interventions in Rwanda. FONERWA has been designed to disburse climate finance to the public sector, including government agencies and districts. FONERWA earmarks 10 per cent of its total funds for districts and 20 per cent for the private sector. Civil society organisations, including academic institutions are able to access climate finance for investment in LCCRD.

Rwanda has completed four public calls for proposals to date. See Table 2 for a summary of the types of investments and investors that are being supported by climate finance.

[3] At the time of conducting research CRGE investment categories were identified in the Draft Sector Reduction Mechanism (SRM). The SRM was expected to guide the preparation and implementation of sector specific investment plans. It is likely that guidance developed under the GTP II will replace the SRM.
[4] MoFED 2015 http://www.mofed.gov.et/English/Featured%20Articles/Pages/TheCRGEFastTrackInvestments.aspx Website accessed on 18th November 2015

Table 1: CRGE fast track fund allocation in 2015

SECTOR	TOTAL ALLOCATION FOR 18 MONTHS (US$ IN MILLION)	FAST TRACK INITIATIVES
Agriculture	6.8	• Piloting climate proof and low carbon agricultural investments in Ethiopia • Practicing climate-smart agriculture in pastoral areas • Developing monitoring and evaluation (M&E), measuring, reporting and verification (MRV), and long-term investment plans for the agricultural sector • Piloting a conservation agriculture CRGE in the Rift Valley Ecosystem
Urban development and construction	1.5	• Developing urban parks • Developing solid waste management systems
Forestry	3.5	• Empowering women through better management of forests and development of microenterprise • Developing bamboo plantations in the highlands of the Upper Rift Valley • Managing bamboo forests in Benishangul • Rehabilitating watersheds in the Amhara Highlands • Promoting participatory forest management (PFM) in Dire Dawa • Developing low-cost construction materials from invasive tree species • Undertaking reforestation/afforestation in the Somali region
Ministry of industry	1.5	• Developing MRV system for measuring greenhouse gas emissions • Greening the Bole-Lemi industrial zone
Ministry of transport	1.5	• Encouraging non-motorized transportation via the 'Share the Road' campaign • Encouraging smart parking
Energy	3	• Developing solar power to extract water for various uses, including irrigation • Promoting the Ethiopian National Biogas Programme • Providing strategic support for developing improved water monitoring systems • Strengthening the monitoring capacity of downstream petroleum operations • Improving the livelihoods and lifestyles of rural communities in emerging regional states through the dissemination of solar energy technologies
Water	3	
Total	20	

Source: CRGE Secretariat, MoFED

Table 2: Type of investments and investors supported by climate finance in Rwanda

PROJECT TITLE	TYPE OF IMPLEMENTING ORGANISATION	FUNDING MODALITY
Rooftop Rainwater Harvesting in high density areas of Nyarugenge, Gasabo, Kicukiro, Musanze, Nyabihu and Rubavu Districts	Government of Rwanda (GoR) (national)	Grant
Akanyaru watershed protection project	GoR (district)	Grant
Vulnerable ecosystem recovery programme towards climate change resilience	GoR (national)	Grant
National e-waste management strategy for Rwanda to support the establishment of sustainable recycling industries	GoR (national)	Grant
Sustainable Management and Environmental rehabilitation for poverty reduction	Non-governmental organisation	Grant
Integrated Land, Water Resources and Clean Energy Management Toward Poverty Reduction Project, Musanze District	GoR (district)	Grant
Gaseke Minis-Hydro Power Plant	Private sector	Line of credit
Supporting Integration of Green Growth Strategy in the District Development Plans	GoR (national)	Grant
Technical and Structural Studies For Incorporating Resource Efficient and Environmentally Friendly Features into Family Homes at Cactus Green Park (CGP), Gasabo District, Kigali City	Private sector	Grant
Sustainable biodiversity: mapping and domesticating the mycological riches of Rwanda's forests	Private sector	Grant
Karongi District integrated greening village Program	GoR (district)	Grant

Source: FONERWA (accessed on 20th April 2015) http://www.fonerwa.org/projects/

Financial needs

Public, private and civil society actors are expected to invest in LCCRD.

The preceding section outlines the types of investments that are expected to build a low carbon climate resilient economy in Ethiopia and Rwanda. These include interventions that will: enable investment in LCCRD (like climate information services and climate legislation), mainstream LCCRD activities into regular development (like integrating LCCRD investment plans into annual development planning), and mainstream development activities (like investment in renewable energy technology).

The specific financial needs of these investments are mentioned in initial costing exercises carried out in both countries.

In Ethiopia, investment in green economy is expected to cost US$150 by 2025. This amounts to approximately US$7.5 billion per year. The cost of adapting to climate change in Ethiopia is forecast at upto US$10 billion a year (World Bank 2010). See Table 3 for additional details on costs of investing in CRGE.

The demand for climate finance in Ethiopia exceeds the current supply of climate finance, most of which is drawn from national and international sources of public finance. In the budget year 2011/12 an estimated US$569 million (1.8 per cent of GDP) was allocated

Table 3: Costs of implementing a climate resilient green economy pathway in Ethiopia

CLIMATE CHANGE INITIATIVE	APPROXIMATE COSTS	NOTES
Green economy strategy	US$150bn over 20 years	The green economy strategy follows a sectoral approach and has identified more than 60 initiatives that will help the country achieve its development goals whilst limiting greenhouse gas emissions.
Climate resilience strategy: agriculture	US$600mn by 2030 in addition to ongoing climate relevant investment	There is a significant overlap between 'development investments' and 'resilience building investments'. Investment in the agriculture sector comes from the federal budget and other sources such as regional budgets, donor finance and private sector. Between 2007 and 2013, 60% (US$0.3bn) of the federal budget was spent on 'resilience building' activities.
National Adaptation Programmes of Action	US$770mn	There are 11 projects.
Ethiopia's Programme of Adaptation on Climate Change	US$10 million	There are 29 different components addressing climate resilience and poverty reduction.

Table 4: Bilateral flows of climate finance for climate change adaptation and mitigation (in US$ millions)

YEAR	ADAPTATION: PRINCIPAL INVESTMENT	ADAPTATION: SIGNIFICANT INVESTMENT	MITIGATION: PRINCIPAL INVESTMENT	MITIGATION: SIGNIFICANT INVESTMENT
2010	34.57	255.16	50.45	143.42
2011	30.64	47.55	45.85	14.74
2012	52.39	148.29	28.28	49.93
2013	73.48	228.71	83.63	59.16
TOTAL	**191.08**	**679.71**	**208.21**	**267.25**

Source: OECD-DAC: Creditor Reporting System database (updated on 8 April 2015)

to cover climate relevant expenditure (Eshetu et al 2014). Taking a more macro picture, domestic revenue in the current five-year plan (2010–2015) is expected to increase from US$3.5 billion in 2010 to US$9.15 billion[5] in 2015 (MoFED, 2010). Even with a three-fold increase in domestic revenue, the country won't be able to raise the required US$7.5 billion for CRGE. In terms of international sources of public finance, the country aims to draw down on multilateral and bilateral funds. Over the last four years (2010–2013) the country received a total of US$1.3 billion in the form of overseas development assistance (ODA) for investment in adaptation and mitigation (OECD-DAC tracker).

In Rwanda, the financing gap across the FONERWA thematic financing windows is estimated at US$100 million per year. The financial gap assessment is based on differences between requested and approved budgets using the 2010/11 budget law, as well as financing gaps identified in sector and sub-sector strategic plans. Table 5 provides details of the financial gap across the FONERWA thematic windows.

[5] Exchange rate of 18.9 Birr to 1 USD

Table 5. Rwanda: Financing gaps across the FONERWA investment windows (Rwandan franc in million)

THEMATIC WINDOW AND ENTRY POINT	FUNDS REQUESTED	FUNDS APPROVED	FINANCING GAP
Thematic financing window 1: conservation and sustainable management of natural resources	47,160	28,009	19,151 (41%)
Thematic financing window 2: research and development, and transfer and implementation of technology	30,636	26,417	4,219 (14%)
Thematic financing window 3: environment and climate change mainstreaming	18,591	122,403	6,187 (33%)

Source: FONERWA (2012)

Table 6. Bilateral flows of climate finance for investment in adaptation and mitigation (US$ in million)

YEAR	ADAPTATION: PRINCIPAL INVESTMENT	ADAPTATION: SIGNIFICANT INVESTMENT	MITIGATION: PRINCIPAL INVESTMENT	MITIGATION: SIGNIFICANT INVESTMENT
2010	0.08	53.84	3.36	12.36
2011	1.82	9.3	4.03	63.51
2012	2.97	4.66	0.26	30.93
2013	4.34	118.77	4.58	42.88
TOTAL	9.21	186.57	12.23	149.68

Source: OECD-DAC: Creditor Reporting System database (updated on 8 April 2015)

To date Rwanda has mobilised US$3.7 million from the government of Rwanda (FONERWA website) and US$ 357.69 million, over four years (2010–2013), from ODA (OECD-DAC tracker) for investments in adaptation and mitigation. Refer to Table 6 for an annual breakdown of ODA investment in LCCRD.

Both, Ethiopia and Rwanda aim to support investment in LCCRD for the next 10 to 35 years. This will require access to sustained sources of financing. Also, the types of activities being prioritised, including investment in enabling activities and investment in new and renewable sources of energy and innovative technology will need to draw down on long-term sources of finance like sovereign wealth funds and/or institutional investors that have a long-term investment timeframe. To date, both countries draw down on sources of finance that have a short- to medium-term investment horizon. For instance, most ODA commitments have a 1–5 year investment horizon and are subject to political timescales.

Global flows of climate finance also indicate a mismatch between the demand and supply of climate finance. Current global flows of climate finance are dominated by short-term sources of private finance, which are mostly invested in the country of origin with the aim of securing an economic return on investment (See Table 7). As such, many of the least developed countries and poor and small-scale investors within these countries lack access to both scaled-up and long-term finance for LCCRD.

Given this investment landscape, policymakers will need to identify appropriate financial intermediaries, instruments and planning systems to manage existing public finance in ways that will leverage and channel scaled-up, long-term finance for inclusive investment in LCCRD.

Table 7. Global flows of climate finance

SOURCE	INTERMEDIARY	INSTRUMENT	USE
Global climate finance flows reached approximately US$343–385bn in 2010/2011.	Public and private intermediaries, especially national development banks and commercial banks, played an important role in raising and channelling global finance (US$110–120bn).	Most climate finance, US$293–347bn out of the US$364bn, can be classified as investments in which public or private financial institutions have ownership interest or claim, ie money, which has to be paid back, rather than contributions to incremental costs. Major categories of instruments include: policy incentives (including income enhancing mechanisms such as feed-in tariffs, tradable certificates, tax incentives and subsidies), risk management (including guarantees), carbon offset finance (Clean Development Mechanism), grants, low cost debt, capital instruments (including project-level market rate debt and equity and balance sheet financing).	Mitigation activities (mostly in the realm of renewable energy and energy efficiency) received US$350bn and adaptation activities received US$12.3–15.8bn (primarily as incremental cost payments). Agriculture and forestry received the greatest share.
The private sector contributed US$217–243bn or 63% of the total amount (the majority of the finance), which came mostly from asset finance.	Private commercial banks and infrastructure funds intermediated approximately US$38bn.	Market rate loans and equity provided US$293bn	
The public sector contributed US$16–23bn or 5–6% of the total amount. A large proportion came from the national government and Overseas development assistance (ODA).	A large part of the ODA was received via bilateral finance institutions. Dedicated climate funds contributed at least US$1.5bn to overall flows.	Concessional loans provided 60% of public finance, grants provided 7%. Risk management instruments (guarantees), grants, low-cost debt and 'balance sheet' financing are the most common forms of finance provided by government money.	A sizeable proportion of domestic public finance was used to support renewable energy and related infrastructure.

4

Shaping the national climate finance landscape: actors, policy options and policy networks

The chapter outlines actors and the policy choices that they make to mobilise and deliver finance for inclusive investment in LCCRD. The potential effectiveness of policy options in mobilising and delivering finance is assessed. We then go on determine the emergence of policy coalitions (networks) behind specific policy options aimed at financing LCCRD.

Actors shaping the national climate finance landscape

A range of international and national actors is influencing the policy choices in the national climate finance landscape in Ethiopia and Rwanda.

International actors include:

1. Multilateral banks and agencies like the World Bank, the African Development Bank and the United Nations Development Programme (UNDP). Policymakers from each of these institutions are responsible for managing multilateral sources of climate finance disbursed to Ethiopia and Rwanda. For instance, the African Development Bank Group and the International Finance Cooperation are responsible for managing Scaling up Renewable Energy Programme funds allocated to Ethiopia; the UNDP is responsible for managing the international window of Ethiopia's CRGE Facility.
2. International climate funds like the Green Climate Fund, the Adaptation Fund and the Climate Investment Funds. Policymakers from each of these funds influence the choice of financial intermediaries, financial planning systems and financial instruments used to access and manage multilateral sources of climate finance.
3. Bilateral partners like the Department of International Development (DFID) of UK, Danida of Denmark and the Austrian Development Agency have supported

the operationalisation of the national climate change fund in Ethiopia. All three serve on the advisory board of the CRGE Facility. DFID and Norway, for instance, are assessing the possibility of using public finance management systems and results-based financing to manage and deliver finance for investment in CRGE. In Rwanda, DFID, KfW of Germany and the Netherlands have played a key role in operationalising FONERWA.

4. International non-governmental organisations and intergovernmental organisations, such as the Global Green Growth Institute and the Climate and Development Knowledge Network provide support to federal ministries, the CRGE Facility and FONERWA on issues such as capacity building, knowledge management and preparation of strategic documents.

National actors include:

1. **National agencies**: National agencies like the Ministry of Finance and/or key line ministries responsible for disbursing climate finance are responsible for developing fiscal policy and public finance management systems used to mobilise and manage funds.
2. **National development finance institutions:** These play a key role in mobilising and delivering finance for investment in LCCRD. In Rwanda, the Development Bank of Rwanda manages the FONERWA credit line for private sector investment in LCCRD. In Ethiopia, microfinance institutions and the Development Bank of Ethiopia play a key role in delivering finance for investment in CRGE type of initiatives.
3. **Commercial financial institutions**: Commercial banks like the Nib International Bank in Ethiopia and the Bank of Kigali could play a key role in supporting private sector investment in LCCRD.
4. **National climate change funds**: National climate change funds in Ethiopia and Rwanda play a key role in shaping the climate finance landscape. In Rwanda institutional arrangements to manage the FONERWA fund include a management committee, which operates at the highest level of government to ensure management and oversight of FONERWA. The committee approves budgets and work plans and makes the ultimate funding decisions, and is responsible for monitoring and directing the fund's activities. There is also a technical committee, which is supported by a team from the Ministry of Finance: the team ensures that there is no duplication between activities funded by FONERWA and activities already in annual plans. It also means that activities supported by FONERWA are aligned with national priorities outlined in the National Development Plan. The management and technical committees are both staffed by members from central and sectoral ministries. In Ethiopia institutional arrangements to manage the CRGE Facility include a management team, a technical team, implementing entities and executing entities. The management team is housed in the Ministry of Finance and Economic Development and it is responsible for financial management. The technical team is housed in the Ministry of Environment and Forest and it is responsible for coordinating the CRGE planning process. The implementing entities (sector ministries) are responsible for identifying CRGE investment priorities and the executing entities (public, private and civil society organisations) are responsible for managing the spending of CRGE investments. The government is currently considering how best to align the CRGE Facility's institutional structures with existing public finance management structures.

The national actors listed above work with specific financial intermediaries, financial instruments and financial planning systems to mobilise and manage finance for investment in LCCRD.

Policy choices shaping the national climate finance landscape

International and national policy actors make specific policy choices when it comes to shaping the national climate finance landscape. Depending on their policy mandate and capacity, policymakers target specific sources of finance for investment in specific LCCRD priority areas. In order to access and deliver finance from its source to its end use/users, policymakers work with specific financial intermediaries, instruments and financial planning systems. Our study illustrates that policy choices shaping the national climate finance landscape can be categorised into two broad approaches:

Single-pronged approach: In this approach, policy actors prefer to work with a single financial intermediary, financial instrument and financial planning system to mobilise and manage climate finance for LCCRD. A single-pronged approach is usually well suited for accessing specific sources of finance and managing specific financial investments.

Policy actors such as multilateral banks, development partners and national agencies tend to support a single-pronged approach to resource mobilisation and delivery. They generally target a single source of finance for investment in LCCRD. Multilateral and bilateral agencies target mostly international sources of public finance and national government agencies target national and international sources of public finance for investment in LCCRD. Actors within these entities tend to use financial instruments that minimise financial risks for the end user (grants, guarantees, insurance and concessional loans). They often channel finance through public sector financial intermediaries (multilateral development banks and agencies, national agencies and national development banks) and tend to rely on public financial management systems to manage the flow of climate finance.

Multi-pronged approach: In this approach, policy actors prefer to work with a range of financial intermediaries, instruments and planning systems to mobilise and manage climate finance for LCCRD. A multi-pronged approach allows policymakers to access diverse sources and channel finance to diverse users and uses.

Policy actors managing climate funds and national finance institutions tend to support a multi-pronged approach to resource mobilisation and delivery. They target a range of international and national sources of public and private finance. They are also able to deliver resources to a range of public and private sector investors for investment in LCCRD. These actors rely on a range of financial intermediaries, instruments and financial planning systems to access and deliver finance for inclusive investment in LCCRD (Figure 2).

A multi-pronged approach to resource mobilisation and delivery is reflected in the official policy narrative in both Ethiopia and Rwanda. Policy options are articulated in national development policies, climate change policies and in operational manuals linked to the climate change funds in both countries.

In both countries, policy direction is shaped by key principles aimed at delivering appropriate finance for investment in LCCRD. These include the principle of 'leveraging' and/or 'catalysing' finance from different national and international public and private sources of finance to mobilise the scale of finance required, and, the principle of 'country ownership' and 'programmatic delivery' to achieve greater efficiency and effectiveness in financial flows targeting investment in LCCRD.

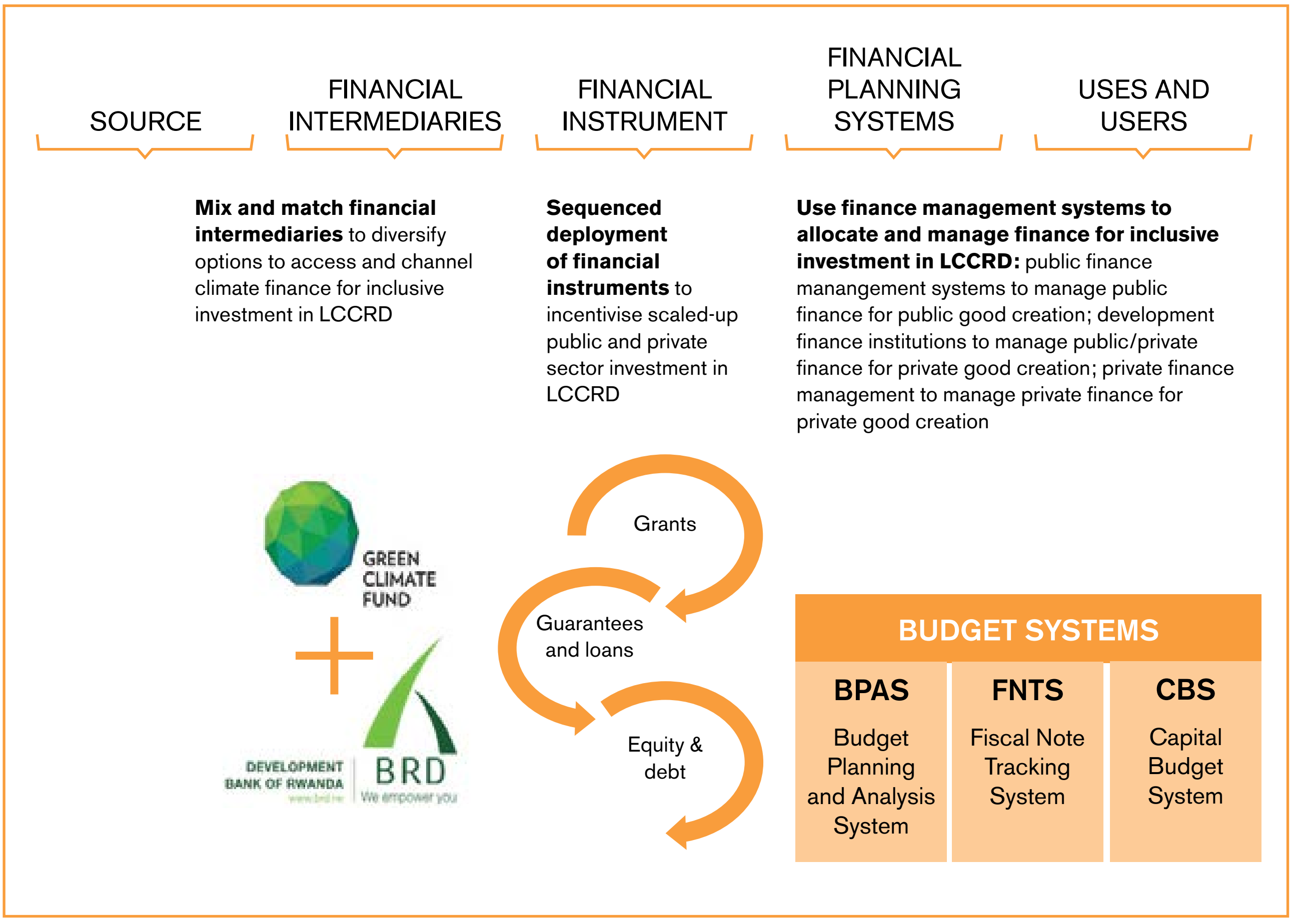
Key design attributes of a multi-pronged approach to resource mobilisation and delivery include:

- **Mix and match financial intermediaries to diversify options to access and channel climate finance for investment in LCCRD:** Policy direction in both countries promotes a mix-and-match of financial intermediaries to diversify options to access and channel climate finance for inclusive investment in LCCRD.

  The government of Ethiopia has established a national climate change fund, known as the CRGE Facility, as the primary intermediary for mobilising and disbursing climate finance for CRGE investments. The facility has been designed to pool multiple sources of international and national finance, thereby mobilising resources efficiently. So far it has successfully accessed bilateral sources of climate finance and has applied for accreditation to the Adaptation Fund and the Green Climate Fund under the United Nations Framework Convention on Climate Change in order to access multilateral sources directly. The facility enables Ethiopia to manage climate funds within a single coherent system that allows investors to determine best practices to support the country's CRGE objectives. This 'programmatic approach' aims to minimise transaction costs, fragmentation and duplication associated with funding unconnected projects. The facility has been designed to work with additional financial intermediaries to access and channel climate finance. It will work with implementing entities and executing entities to disburse public finance for investment in LCCRD. It can work with national financial institutions to disburse public and private finance for private sector investment in LCCRD.

  The government of Rwanda has established a national climate change and environment fund, known as FONERWA. The fund has been designed to evolve as different sources of finance and new investment areas become viable. In the short to medium term, the Ministry of Environment and Natural Resources will manage the fund to mobilise and disburse public sources of finance, while the Development Bank of Rwanda will manage a credit facility to incentivise private sector investment. If investments in low-carbon, climate-resilient development become commercially viable, FONERWA has the scope to evolve into, and be managed as, a venture capital fund in the long term.

Figure 2: Policy options to mobilise and deliver finance for inclusive investment in LCCRD



- **Sequenced deployment of financial instruments to incentivise scaled up public and private sector investment in LCCRD:** Economic and financial 'instruments' provide incentives for investment in LCCRD. An economic instrument is any framework, including policy and regulatory frameworks, which influences producers' and consumers' behaviour by causing changes in prices. For instance, the government of Ethiopia is using power purchase agreements and feed-in tariffs to encourage investment in renewable energy. A financial instrument is any contract, which gives one entity a financial asset and another a financial liability. Financial instruments that incentivise LCCRD investments include risk management instruments such as guarantees, insurance, grants, concessional loans, and capital instruments of equity and debt finance. Different instruments will suit different investment needs: risk management instruments enable investors to invest in high risk investment portfolios; grants are effective in supporting investments in climate resilience; and capital instruments are effective once LCCRD investments are commercially viable. The government of Ethiopia is planning to deploy a range of financial instruments through the CRGE Facility to support investments in CRGE initiatives. These will include grants, concessional loans and results-based payments.

Similarly, the government of Rwanda is planning to deploy financial instruments in a phased approach to support the evolving financial needs of CRGE investments. Short-term financial instruments (operating for up to a year) will include in-kind support such as technical assistance, grants to support investments by public sector investors, and performance-based grants to support investments by private sector investors. Medium-term financial instruments (operating for two to five years) will include guarantees and low interest/concessional loans. Long-term financial instruments (operating for more than five years) will include equity investments, subject to FONERWA's performance and private sector demand.

- **Financial planning systems to allocate and manage climate finance for investment in LCCRD:** Both countries plan to use a range of financial planning systems to manage and govern the flow of climate finance. For instance, in Rwanda the government has used budget and planning systems to leverage greater synergy between investments. Funds disbursed by FONERWA are incorporated into the annual budget allocation of government ministries and public sector agencies to encourage integrated investment and avoid duplication and fragmentation. The fund uses the reporting systems of the Rwanda Development Bank to account for FONERWA funds disbursed to the private sector. The government plans to use private sector management systems (venture capital funds) once private finance is used to finance private sector investment in LCCRD. Ethiopia is currently assessing how best to manage climate finance using public finance management systems, including the annual budget and planning cycles.

Both countries have developed policies to establish the climate change funds and operational manuals to guide the flow of resources channelled through the funds. These policies outline institutional structures to support better synergy between different sources of finance and different investment portfolios.

Effectiveness of policy options

The preceding section outlines the emergence of a multi-pronged approach alongside the more traditional single-pronged approach to resource mobilisation and delivery of finance for investment in LCCRD.

This is likely to be a response to the changing financial landscape and investment needs. Early investment in climate change focused on piloting investment in immediate adaptation priorities as outlined in the National Action Plans for Adaptation and Climate Investment Funds programmes. These investments relied largely on multilateral and bilateral sources of finance that were delivered through multilateral agencies using grants and concessional loans.

Current LCCRD investment in Ethiopia and Rwanda focuses on a range of short-, medium- and long-term initiatives that will either create an enabling environment for future investment, mainstream LCCRD initiatives into existing development planning and/or incentivise investment in new LCCRD business models. Public and private sector investors from the international, national and local level are all expected to invest in these initiatives. Multi-pronged approaches are better suited to accessing finance from a range of financial sources, and supporting the financial needs of public and private sector actors investing in LCCRD. For instance, Rwanda and Ethiopia aim to use a range of financial intermediaries, instruments and planning systems to incentivise scaled up and long-term finance for public and private sector investment in LCCRD. Box 1 illustrates how a mix and match of financial intermediaries and instruments is effective in leveraging and delivering additional finance to coffee cooperatives in Ethiopia.

BOX 1. THE COFFEE INITIATIVE'S RISK SHARING FACILITY IN EHTIOPIA

Nib International Bank/International Finance Corporation risk sharing facility under the coffee initiative in Ethiopia
This case example illustrates how a mix and match of financial intermediaries and instruments can be used to leverage additional financing for investment in activities that build resilience to climate change.

The coffee initiative (CI) was initially supported by a US$10 million grant from the Bill Gates Foundation to provide business solutions to small-hold coffee cooperatives. Business solutions were aimed at boosting the incomes of smallholder coffee farmers by improving business viability, governance and quality management systems of wet mills used in coffee production; increasing productivity through field-based agronomy training; and optimising the overall farm-to-market value chain.

The Financial intermediaries responsible for channelling the finance from its source to its end users included TechnoServe, the International Finance Corporation (IFC) and the Nib International Bank (NIB). In 2010 TechnoServe helped establish a new relationship between IFC and NIB to unlock the substantial amount of capital required for investment in coffee production and to enable smallholders to access finance without collateral. This arrangement was enabled by the use of financial instruments.

The Financial instruments: TechnoServe provided a **guarantee** of US$10 million to the IFC. This enabled the IFC to establish a US$10 million **risk sharing facility** with NIB, which was then able to provide a **revolving loan facility** to 62 coffee cooperatives, representing approximately 47,000 farmers. The facility offered up to US$250,000 per cooperative, disbursed against cash flow requirements and collateralised by coffee stocks.

Outcomes of using guarantee and the revolving loan facility: The financial instruments were able to provide unbanked cooperatives access to credit, which in turn has unlocked additional financial investment in coffee production from private banks and the cooperatives.

1. Previously unbanked cooperatives have been able to export over 2 million pounds of high quality coffee to 12 international buyers in Europe and US whilst receiving premiums of 40% more than the price of low quality unwashed coffee, on average. By the end of the first phase, participating cooperatives had earned US$11 million in revenue and the financial instruments had directly contributed to the creation of more than 1000 wet mill jobs.
2. In addition to the loan guarantees provided by IFC, the CI secured guarantees from Rabobank and Falcon Commodities, which is a major coffee buyer. As part of these guarantees, local Ethiopian banks increased their share of credit risk from 0% to 35% when lending to CI clients. There is an expectation that by gradually encouraging local banks to lend to the coffee sector, the financial services available to coffee cooperatives will continue to expand.

Source: adapted from Technoserve Ethiopia http://www.technoserve.org/our-work/where-we-work/country/ethiopia#_resources

Emerging networks

Given that both single and multi-pronged approaches have their benefits and limitations to mobilising scaled-up and long-term finance for LCCRD - we now go on to consider the extent to which policy networks (coalitions) are being formed to support each one.

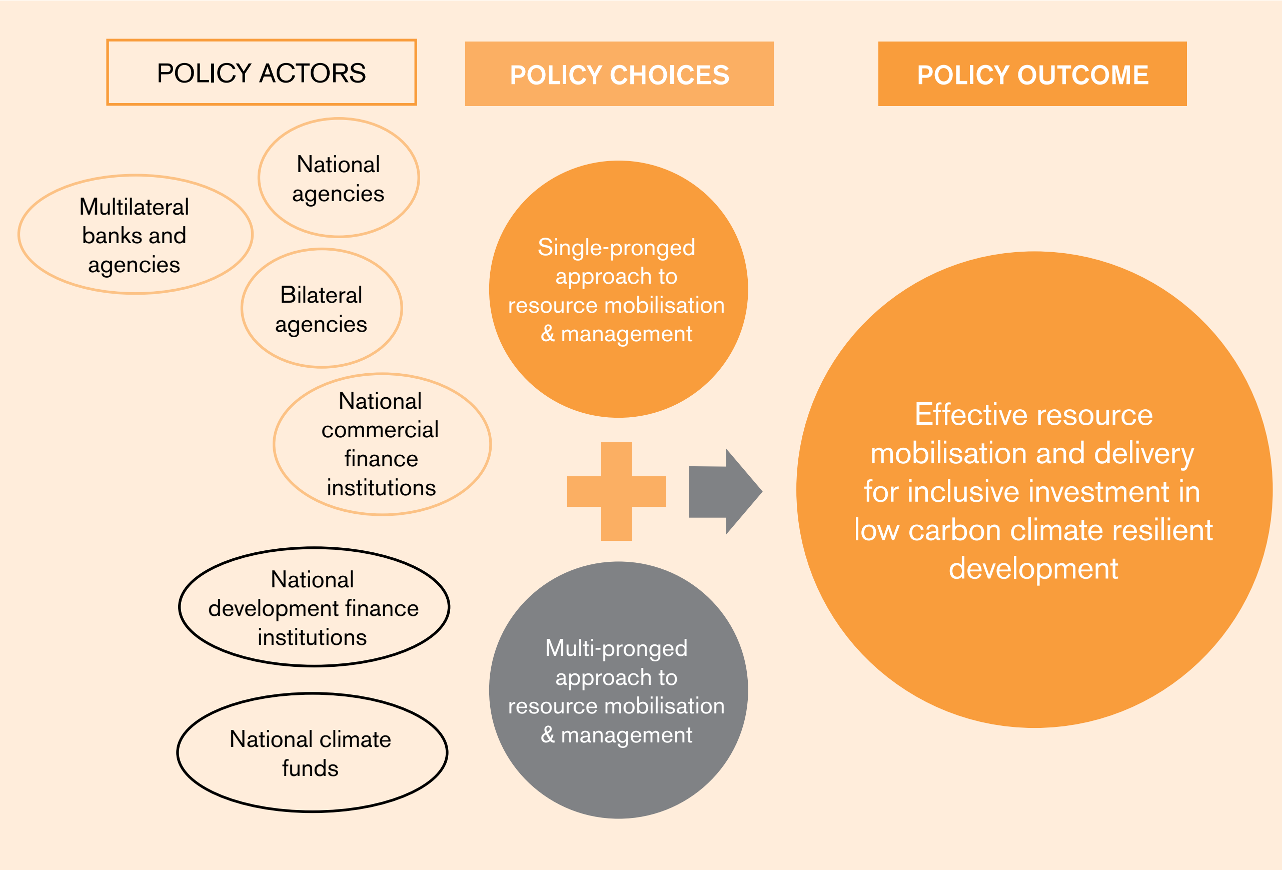
Coalitions between policy actors that shape the national financial landscape can create a shared understanding of how to deliver effective policy options to finance inclusive investment in LCCRD (UNEP 2015). Coalitions can also improve coordination between policy actors enabling better synergy and alignment between policy options.

Figure 3 illustrates how actor networks are emerging around policy options. Actors that tend to cluster behind either approach do so due to their policy mandates, capacity constraints and strengths.

Multilateral banks and national agencies tend to cluster around single-pronged approaches to resource mobilisation and delivery. This choice is likely to be driven by path dependence and experience of working with specific financial intermediaries, instruments and planning systems.

Bilateral agencies and national commercial banks tend to target single sources of finance, but are able to deliver finance using a range of financial intermediaries and instruments.

Figure 3 Coalitions for financing inclusive investment in LCCRD



National development finance institutions and climate funds are able to target multiple sources of finance and use a range of financial intermediaries, instruments and planning systems to deliver finance for investment in LCCRD.

The emerging networks are yet to evolve into a strategic coalition based on joint action. At the moment they tend to align in their interest to mobilise and deliver finance for inclusive investment in LCCRD, but lack coordination. For instance, policy actors across the national and international scale would benefit from sharing experience on financial intermediaries, instruments and planning systems that are effective in mobilising and delivering finance for LCCRD. Such an exchange could potentially enable international financial intermediaries like the Green Climate Fund to prepare appropriate incentives and instruments to enhance the capacity of national financial intermediaries to mobilise and deliver climate finance. Within the national landscape, enhanced learning and coordination between actors that support single- and multi-pronged approaches to resource mobilisation and delivery would enable policy makers to leverage financial outcomes that are greater than the sum of their parts.

6 Conclusion

Mobilising and delivering finance for inclusive investment in LCCRD is a new and complex policy area.

There is a clear mismatch between national LCCRD investment priorities and the scale and type of international and national finance available.

Our study shows that policymakers in Ethiopia and Rwanda are identifying effective policy options to mobilise and deliver climate finance for LCCRD. Single-pronged approaches that use single financial intermediaries and instruments have a comparative advantage in accessing and managing specific sources of finance. Multi-pronged approaches that use multiple intermediaries and instruments are effective in accessing and managing multiple sources of finance and delivering these to a range of investors.

Our study finds that networks of policy actors are emerging around these policy options – but these networks are yet to evolve into a strategic coalition based on joint action.

Coalitions between policy actors that shape the national financial landscape can create a shared understanding of how to deliver effective policy options to finance inclusive investment in LCCRD (UNEP 2015). Coalitions can also improve coordination between policy actors enabling better synergy and alignment between policy options.

Policymakers should consider preparing incentives and structures to support coalitions between policy actors who are involved in the national climate finance landscape. These include:

1. Introducing policy and regulatory incentives that provide a mandate for better linkages between financial intermediaries. For instance, in Rwanda the FONERWA operational manual provides a mandate for the climate change fund to work with the development bank to mobilise and deliver finance for investment in LCCRD. Policy and regulatory incentives can also be used to align private sector interests with public goals and to ensure financial inclusion.
2. Introducing capacity based incentives that strengthen the capacity of financial intermediaries to deliver coordinated financial support for investment in LCCRD.
3. Establishing financial initiatives that enable traditional and new actors in the climate finance landscape to work with each other.
4. Establishing peer learning and experience sharing platforms to develop a better understanding of how single and multi-pronged options deliver finance for investment in LCCRD.

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Annex I: Official policy narrative

Table 8. Policy Documents

POLICY DOCUMENT	POLICY DETAILS
Ethiopia	
CRGE Facility: Operations Manual	The manual provides details on the role and operation of the facility. It clearly outlines the proper procedures for the practical application of CRGE initiatives. Thus, it will enable the smooth implementation and management of CRGE Facility. **Mobilising finance for investment in CRGE** Policy objectives around resource mobilisation are articulated in the CRGE Vision, CRGE Facility: Operations Manual (Draft) and the Sector Reduction Mechanism (Draft). Broadly, objectives focus on mobilising the required scale of finance (in addition to US$200 billion for CRGE) within a stipulated time frame (2030). To achieve the aforementioned objectives, the policy documents place emphasis on accessing and leveraging different sources of finance. **Sources**: The government of Ethiopia aims to target primarily public finances from innovative international and national sources of finance to catalyse investments in CRGE initiatives. The government is designing a flexible approach to the use of financial intermediaries and instruments in order to access various sources of climate finance. For instance, asset financing is being considered to tap into private sources of finance; results based payments and debt finance instruments are being considered to draw from innovative sources of finance from carbon markets and green bonds; and grants and risk mitigation instruments are being considered to draw from public sources of finance, donor partners and multilateral and bilateral funds. **Leveraging**: The CRGE Facility aims to access and manage existing climate finance in ways that will leverage or unlock additional finance for investment in CRGE. To do so, it will 'pool' different sources of finance and/or 'blend' climate finance with other existing forms of investment to leverage investments for CRGE. **Managing finance for investment in CRGE** Policy documents articulate a number of objectives around the management of financial resources. Broadly speaking, these include: **Country ownership**: The government of Ethiopia has established the CRGE Facility as the primary mechanism responsible for mobilising, managing and disbursing climate finance. The facility aims to ensure strong country ownership of the management of climate finance and the country's transition to a CRGE development pathway. The country is currently developing an integrated resource management framework that will enable policy actors to manage financial resources effectively. The government has also put in place institutional arrangements that will enable effective management of the transition to CRGE.

POLICY DOCUMENT	POLICY DETAILS
Ethiopia	
CRGE Facility: Operations Manual (cont.)	**Programmatic approach**: The government of Ethiopia is keen to adopt a programmatic approach in managing the country's transition to a CRGE pathway. Policy documents refer to programmatic as a "holistic approach to CRGE that will require working across technical, sectoral, and geographical boundaries to bring about sustainable change that will contribute to Ethiopia's growth and transformation". Such approaches aim to "minimise the transaction costs, fragmentation and duplication associated with project-based approaches". To operationalise this objective, the CRGE Facility has been designed to enhance the coordination and targeting of climate finance to achieve better outcomes. The facility provides a single coherent system in which stakeholders can engage and determine how best to invest in relevant actions. The facility has a 'programmed window', which will channel funds subject to 'strategic agreements', or actions that are aligned with the CRGE Strategy framework. It also has a 'responsive window', which will channel funds subject to 'targeted agreements', that is, funds that are subject to geographic or technical earmarks that are not aligned to the CRGE Strategy framework. **Integration**: The government of Ethiopia aims to align and integrate the CRGE with the GTP over time. Various financial planning systems are being explored to achieve this goal including alignment with the existing budget cycle and development of a CRGE budget code. A CRGE mainstreaming guideline, including a checklist and indicators, has been prepared by the Ministry of Environment and Forest (MEF) and disbursed to the National Planning Commission (NPC). It is now under internal review. **Allocating finance for investment in CRGE** Policy objectives around the disbursement of climate finance include objectives on the type of action and type of access: **Type of action**: The government of Ethiopia aims to disburse financial resources towards CRGE investments. Implementing entities comprising federal and regional entities are expected to prepare Sector Reduction Action Plans (SRAPs) to provide details on investments that will achieve climate resilience and green economy targets. The MEF will coordinate the preparation of Thematic Reduction Action Plans (TRAPs) to articulate cross-cutting CRGE investments. These will contain proposed interventions for each sector and quantify the investment needed for Type 1 (enabling activities), Type 2 (mainstreaming activities) and Type 3 (investments). **Type of access**: 90% of pooled funds are channelled to executing entities for implementation. Facility funds are allocated to relevant ministries at federal and regional levels against prioritised investments detailed in the SRAP/TRAP. Civil society organisations and the private sector can access funds from the 'responsive window' in partnership with implementing entities.
CRGE Vision	The document aims to provide a common goal and roadmap for achieving a climate resilient green economy in Ethiopia. It builds on national development and climate change policies such as the Growth and Transformational Plan (GTP), National Environmental Policy, nationally appropriate mitigation actions, and Ethiopia's Programme of Adaptation to Climate Change (FDRE 2011).
Green economy strategy	The policy outlines options for adopting a green economy, including costs. The strategy follows an economy-wide approach that could help the country achieve its development goals while limiting greenhouse gas emissions in 2030 to current levels, which are estimated at 150MtCO2e. This would be approximately 250MtCO2e less than the emissions produced by following a conventional development path (FDRE 2011). The strategy is supported by four pillars: 1. Improving crop and livestock production practices to achieve better food security and raising farmers' income whilst reducing emissions 2. Protecting and re-establishing forests for their economic and ecological value such as their function as carbon stocks 3. Expanding electricity generation from renewable sources of energy for domestic and regional markets, and 4. Leapfrogging to modern and energy-efficient technologies in transport, industry, and building.
Agriculture resilience strategy	The policy aims to address the impact of current weather variability and future climate change on the agriculture sector. It has stated the challenges posed by climate change, provided options for building climate resilience and outlined ways for delivering these options. Out of the 41 options it has identified, 15 have been identified for early action.

POLICY DOCUMENT	POLICY DETAILS
Ethiopia	
Sector Reduction Mechanism (Draft)	The policy outlines the different constituents responsible for supporting a transition to CRGE including the CRGE Facility, governance and management arrangements, and policy guidance for preparing sector reduction investment plans.
Growth and Transformation Plan I	The Growth and Transformation Plan I (2010–2015) is a 5-year plan that aims to foster sustainable development to achieve the Millennium Development Goals. The main objective is to make Ethiopia a middle-income country by boosting agricultural productivity, strengthening the industrial base and fostering export growth. It has included CRGE as a crosscutting strategic priority. The next Growth and Transformation Plan, GTP II (2015–2020), will integrate CRGE into the national development plan.
Rwanda	
Vision 2020	The Vision 2020 sets out the country's goal for transforming into a knowledge-based, middle-income country by 2020. It is anticipated that cross-cutting issues such as protection of environment and sustainable natural resource management will be mainstreamed in all sectors of the Rwandan economy.
Economic Development and Poverty Reduction Strategies (EDPRS 1 and 2)	The Economic Development and Poverty Reduction Strategies: EDPRS 1 and 2 continue to guide the implementation of different policies and programmes aimed at materialising Vision 2020. Rwanda has committed to pursuing a green approach to economic transformation, which favours the development of sustainable cities and villages, piloting a green city and promoting green innovation in industrial and private sector.
Green Growth and Climate Resilience: National Strategy for Climate Change and Low Carbon Development	The strategy sets out Rwanda's vision to achieve a climate-resilient, low-carbon and developed economy by 2050. The strategy specifically pursues a number of strategic objectives, which include low-carbon energy supply, land use and water resource management, social protection, improved health and disaster risk reduction.
National Energy Policy and National Energy Strategy	The key objectives of the policy document are to support national development by ensuring the availability of sufficient, reliable and affordable energy supplies for all Rwandans; promoting the rational and efficient use of energy; and establishing environmentally sound and sustainable systems of energy production.
Operational Manual: Government of Rwanda Environment and Climate Change Fund (FONERWA) Design Project	The overall objective of the fund includes contributing to sustainable wealth creation and poverty reduction in Rwanda through the sustainable management of natural resources and promotion of climate resilient and green economic growth.
Five-Year Strategic Plan for the Environment and Natural Resources Sector (2009–2013)	The five-year plan was developed as a way of "ensuring sustainable management of Rwanda's natural resources and environment to meet EDPRS and Millennium Development Goals targets, Vision 2020 aspirations and international commitments."

Annex II: Semi-structured interviews

We conducted semi-structured interviews with key stakeholders in the climate-finance landscape to understand their design choices. Interviews were transcribed and coded thematically to carry out a storyline analysis around key questions. The interviewees were selected by purposive sampling in order to collate a range of views and perspectives: the sample focussed on policy actors involved in financing investment in LCCRD.

Table 10.

KEY STAKEHOLDER/ FINANCIAL INTERMEDIARY	ETHIOPIA	RWANDA
Multilateral agency	United Nations Development Programme (UNDP)	UNDP, European Union
Bilateral agency	Department of International Development (DFID), Denmark, Norway	DFID, The Netherland Embassy and KfW, Germany
Multilateral bank	World Bank, International Finance Corporation, African Development Bank	
National agency	Ministry of Finance and Economic Development, Ministry of Environment and Forests, Planning Commission (Department of Planning at the time of this study), Ministry of Water, Irrigation and Energy (Ministry of Water and Energy at the time of this study), Ethiopian Electric Power Corporation, Ministry of Agriculture	Ministry of Finance and Economic Planning, Ministry of Natural Resources, Rwanda Environmental Management Authority, Ministry of Agriculture and Animal Resources, Private Sector Federation (Chamber of Industry)
National development finance institutions	Development Bank of Ethiopia, microfinance institutions (Oromia Credit and Saving Share Company (OCSSC); Poverty Eradication and Community Empowerment (PEACE)	Development Bank of Rwanda, Business guarantee fund
Private banks	Nib Bank	Bank of Kigali
Climate Change Funds	CRGE Facility, Strategic Climate Institution Programme, Scaling-up Renewable Energy Programme	FONERWA

International and national policymakers are promoting investment in low carbon climate resilient development (LCCRD) to address the challenges and opportunities provided by climate change. Ethiopia and Rwanda are two of several countries that are investing in an LCCRD pathway. The investment is expected to achieve, protect and enhance development gains made by households and the economy in the context of escalating climate change impacts. Policymakers will need to identify policy options to mobilise and deliver appropriate finance to support investment in LCCRD, including: scaled up finance to support the current and projected cost of LCCRD investments, long-term finance to sustain and incentivise investment in LCCRD, and flexible and accessible finance to enable the most vulnerable to invest in LCCRD.

By showing how policy actors in Ethiopia and Rwanda are shaping investment in LCCRD the paper identifies ways in which policymakers can establish coalitions to mobilise and deliver climate finance for inclusive investment in LCCRD. This paper is based on a political economy analysis of stakeholder choices vis-à-vis climate finance. It outlines the financial intermediaries, financial instruments and financial planning systems, which are used to access and allocate different sources of climate finance.

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