



Bringing together the low-carbon and resilience agendas

Bangladesh, Ethiopia, Rwanda

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Bangladesh, Ethiopia and Rwanda are at the forefront of developing national plans that address elements of both climate change mitigation and adaptation with a low carbon resilient development (LCRD) agenda. This working paper explores the experience of LCRD planning in each country using stakeholder interviews, analysis of policy documents and surveys to understand how this agenda is emerging in practice, and what ideas and discourses are shaping the policy development. Establishing a national consensus on what is understood by LCRD is shown to be important in building stakeholder support for any proposed LCRD agenda, as is clearly defining which co-benefits are being targeted.

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Acronyms

BCCRF	Bangladesh Climate Change Resilience Fund
BCCSAP	Bangladesh Climate Change Strategic Action Plan
CCIOU	Climate Change and International Obligations Unit (Rwanda)
CRGE	Climate-Resilient Green Economy
EDPRS	Economic and Development Poverty Reduction Strategy (Rwanda)
FONERWA	Environment and Climate Change Fund (Rwanda)
GTP	Growth and Transformation Plan (Ethiopia)
IDCOL	Infrastructure Development Company Limited (Bangladesh)
LCRD	low-carbon resilient development
LDCs	Least Developed Countries
MINECOFIN	Ministry of Finance and Economic Planning (Rwanda)
MINIRENA	Ministry of Natural Resources (Rwanda)
NAMA	Nationally Appropriate Mitigation Actions
NAPA	National Adaptation Programme of Action
NGO	non-governmental organisation
NSCCLCD	National Strategy for Climate Change and Low-Carbon Development (Rwanda)
REMA	Rwandan Environmental Management Authority
SRM	Sectoral Reduction Mechanism

Summary

Low-carbon resilient development (LCRD) policies in the poorest countries aim to support climate-resilient development while addressing climate change by reducing carbon emissions. This seeks to bring together the two policy responses to climate change: mitigation and adaptation. National governments in the Least Developed Countries (LDCs) are increasingly considering how to incorporate the LCRD agenda into their future plans. It is important to ensure that this agenda actively supports development and improved livelihoods for the poorest communities while also addressing low carbon issues.

This paper analyses how and why some LDCs are moving towards LCRD policies, what shapes these policy decisions and how to bring together the low-carbon/green growth, resilience and development agendas. This is an important area of research, as national governments and development partners are looking to find synergies between these two objectives and to mainstream such an approach into national planning. This paper presents research in three countries: Ethiopia, Bangladesh and Rwanda. These countries were selected as 'early adopters' of the low-carbon resilient agenda who are looking to merge these objectives into national planning, with their own pathways and priorities.

The paper takes a political economy analytical approach where we explore the underlying values, discourses, knowledge and politics behind climate-resilient planning decisions. This approach helps us understand how low-carbon and resilient planning processes come together in practice, and how underlying discourses and knowledge shape policy responses. We focus on two key elements of political economy: discourse and knowledge. We conducted the research with input from government stakeholders and so focus on internal learning through the research.

Ethiopia, Bangladesh and Rwanda are taking differing approaches to considering climate change in their national planning, which will provide different incentives and frameworks to bring the agendas together. These range from treating mitigation and adaptation as separate issues, to merging them within a standalone climate change agenda, and mainstreaming them into national development planning. In all three countries, governments have developed new institutions and structures to support climate change planning by: drawing cross-sectoral support for this cross-cutting issue; defining financing arrangements; maintaining political support; and building mechanisms for implementation. The new structures also draw on support from national and international experts in aspects of climate change planning.

The understanding of what LCRD means varies hugely both within and between countries. In Bangladesh, environment ministries and power-related ministries have formed coalitions around their different views of what the LCRD agenda means. While in Ethiopia, views remain diverse and there is little evidence of coalitions forming around particular perspectives within or between ministries. Rwanda also shows a diversity of views across stakeholder groups, although they broadly remain within the discourse of long-term environmental sustainability. Each country has identified the co-benefits of its overarching vision in policy documents and strategies, but policies moving towards implementation contain little detail on how these co-benefits will be realised in practice. As policies have often been developed sequentially, identification of their co-benefits has proved difficult during their development. Also, implementation has been sectoral and co-benefits may not fit within one sector or within sectoral priorities.

There is a range of potential incentives for countries to address LCRD in national planning supported by widespread stakeholder consensus. We identified a strong consensus between all three countries that the most important incentives involve accessing climate finance and supporting existing national priorities. In Ethiopia, for example, stakeholders talked about using the LCRD approach to be more ambitious with their national agenda. Some stakeholders in Bangladesh still emphasised that low carbon elements of the agenda should be funded through external sources, highlighting that their priorities lie in developing resilience and potentially including low carbon objectives if externally supported. But Rwandan stakeholders saw incentives for low carbon resilience as closely linked to their broader environmental sustainability agenda.

Government policymakers and other stakeholders need new information to plan for climate change, indicating that this policy area is still emerging. Which information is used and how is partly a political choice, shaped by each country's understanding of what the LCRD agenda is in practice and how it should be implemented. Areas requiring new information included technical data on climate change models, impacts and sectoral data. Technical information on climate models was the most widely required information in Ethiopia, while in Bangladesh technical climate science and sectoral technical data were most in demand, rather than policy approaches and international experience.

1

Introduction

Low-carbon resilient development (LCRD) policies in the poorest countries aim to support climate-resilient development while addressing climate change by reducing carbon emissions. This seeks to bring together the two policy responses to climate change: mitigation and adaptation. National governments in the Least Developed Countries (LDCs) are increasingly considering how to incorporate the LCRD agenda into their future plans. It is important to ensure that this agenda actively supports development and improved livelihoods for the poorest communities while also addressing low carbon issues.

This paper analyses how and why some LDCs are moving towards LCRD policies, what shapes these policy decisions and how to bring together the low-carbon/green growth, resilience and development agendas. This is an important area of research, as national governments and development partners are looking to find synergies between these two objectives and to mainstream such an approach into national planning. This has been supported by decisions at the United Nations Framework Convention on Climate Change (UNFCCC) that seek to incorporate a joint approach to mitigation and adaptation from the Cancun decision, encouraging developing countries to “develop low-carbon development strategies or plans in the context of sustainable development.” (UNFCCC 2010)

The underlying assumption is that addressing these policy areas simultaneously will leverage multiple wins across the agendas and be more cost effective. However, there is not yet sufficient empirical evidence to understand the potential situations in which co-benefits or triple wins can be leveraged, or where trade-offs or regrets will be involved (Tompkins *et al.* 2013). Co-benefits can be defined as both finding areas of mutual benefit between adaptation and mitigation/low-carbon agendas, and finding areas of mutual benefit between aspects of the climate change agenda and national development planning priorities.

This paper presents research in three countries: Ethiopia, Rwanda and Bangladesh. It seeks to explore in more detail the different paths to LCRD and how the governments of these countries are seeking to bring the low-carbon agenda together with resilience and development. These countries were selected as ‘early adopters’ of the low-carbon resilient agenda who are looking to merge these objectives into national planning, with their own pathways and priorities. The paper addresses the question of how merged planning agendas are emerging around a low-carbon resilient agenda by examining policy narratives, institution and stakeholder discourses and seeking to understand where these elements support each other in moving towards implementation.

2

Political economy of climate planning and the use of knowledge

The approach we use in this study is a political economy analysis through a learning and action research model. Approaches to climate-resilient planning contain unspoken assumptions and normative assessments of the solutions to climate change and the most appropriate actors to act on these. The power dynamics between local, national and international players – including governments, donors and the private sector – all play a role in what is planned and how those plans are moved towards implementation.

Using a political economy analytical approach, we explore the underlying values, discourses, knowledge and politics behind climate-resilient planning in developing countries. This approach helps us understand how low-carbon and resilient planning processes come together in practice, and how underlying discourses and knowledge shape policy responses.

We focus on two key elements of political economy: discourse and knowledge. This research has not emphasised the power dimension of a political economy analysis because we have taken an *internal* political economy approach. We conducted the research with input from government stakeholders and so focus on internal learning through the research rather than an externally driven political analysis (see Booth 2011; Copestake and Williams 2012).

Research inputs on discourse and knowledge provide more neutral entry points into discussions with the action research groups of the political economy of the planning sphere with the action research groups. Our discussions with the research groups opened up elements of power dynamics that have fed into the analysis, but initiating discussions around power between stakeholders within and between national governments would have been too political. This research does not therefore offer a full political economy analysis; but it has been strengthened through close engagement with government stakeholders throughout the process.

2.1 Defining terminology

Discourses are shared ways of thinking, talking or interpreting certain social and physical phenomena (Dryzek 2000). We take Maartin Hajer's approach to discourse analysis, looking particularly at policy storylines, which are condensed forms of complex ideas that people use as a kind of shorthand in discussions.

The term *knowledge* has many different meanings. We take Perkin and Court's (2005) definition to suggest that knowledge is "information that has been evaluated and organised so that it can be used purposefully". So, although knowledge is based on information and data, knowledge itself requires internal processing or

understanding by an individual or organisation. This definition moves away from seeing knowledge as an objective source of information to seeing it as something that is in part culturally and socially produced, combined with value judgements and transferred and used within such contexts.

2.2 The use of knowledge in policymaking

The use of knowledge has been increasingly recognised as a political process within policymaking (see Jones *et al.* 2012; Sabatier 1999; Stone 1999). Work around scientific issues in policymaking has also addressed the issues of using different types of expertise (Jasanoff 2002; Wynne 2004). Knowledge is particularly important in international development, where 'knowledge for development' has become a core tenet for some organisations' mandates, while technical assistance, capacity building, policy dialogue and technology uptake make up a significant part of bilateral and multilateral endeavours (Jones *et al.* 2012). This approach has been predominantly technical, seeking to insert or support knowledge generation and uptake rather than understanding knowledge as a political object – both in terms of whose knowledge is valued and how and where it is applied. Jones *et al.* (2012) argue that “the real nub of what transpires in policy processes is often found in the interaction between knowledge and politics – where the negotiation of perspectives, the flow of information and the deployment of arguments and knowledge are all crucial parts of the games of power and politics.”

Policymakers will need different types of knowledge and evidence at different stages – from policy formulation through to intervention. First, they may need initial evidence to make the case for an issue and for a policy response at the agenda-setting phase. They may then need evidence to give alternative policy solutions to support planning. Later, they will need evidence on forms of implementation, operational learning and inputs from pilots and other innovations. Finally, they will need the evidence generated in the earlier phases, along with wider knowledge, at the evaluation stage.

Since 2009, nine LDCs have announced national plans or strategies that incorporate elements of both low-carbon development and resilience to climate change (Fisher 2013). These countries are 'early adopters' of the LCRD agenda, and so offer important insights into how the agenda is working in practice. They also offer other LDCs an opportunity to learn lessons to develop such strategies in the future.

The number of strategies and plans indicates a widespread interest by LDC governments in how they can begin to incorporate aspects of the climate change agenda at the national level and a high level of support from development partners for these planning processes. Our previous work also found that timeframes, institutional structures and financing mechanisms are all important factors in how the low-carbon and resilience agendas might be brought together (see Fisher 2013; Nash and Ngabitsinze 2014; Fikreyesus 2014).

An emerging literature on the political economy of climate-resilient planning (see Tanner and Allouche 2011) has 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.* 2014). This study contributes to furthering the understanding of the political economy of climate-resilient planning within LDCs. It is innovative in its use of a comparative approach to understanding a particular element of climate-resilient planning while also focusing on policy storylines and knowledge.

3

Methods

This research had several phases: policy and institutional analysis, stakeholder interviews and a web-based survey. We also held workshops and action learning groups with relevant stakeholders to present findings and discuss initial analysis. The study is based on applied political economy analysis – we aim to integrate its findings into operations to improve the quality of planning and implementation (Harris and Booth 2013). To achieve effective integration, the research takes an *internal* political economy analysis approach, putting action partners at the centre of the analytical team. As we discussed above, this led us to focus on discourse and knowledge as our entry points for research.

3.1 Policy analysis and semi-structured interviews

We analysed relevant documents in each country to explore the development of official narratives in this area and the official approach to bringing the agendas together. We then conducted semi-structured interviews with key stakeholders on how the climate change strategies were developed, their opinions on what it meant in practice and how the agenda might be brought together. We interviewed 20–25 respondents in each country from four stakeholder groups – government ministries, research and information services, development partners and international organisations, and private sector and civil society – selecting respondents who had been involved in relevant policy development. We wrote up and analysed the interviews along with key documents and policies. This was not intended to be an exhaustive list of interviewees: by using purposive sampling we aimed to get a range of views and perspectives on the process. We transcribed the interviews and coded them thematically. We then carried out a storyline analysis around key questions.

3.2 Analytical framework

We analysed the policies and interview data using a Hajerian policy storyline framework (see Table 1) to understand how coalitions are forming around LCRD policy areas. Hajer (1995, p56) describes the policy process as “a struggle for discursive hegemony in which actors try to secure support for their definitions of reality”.

The framework divides discourses into four elements for analysis – the overarching narrative (policy discourse); the storylines within that narrative; the coalitions that form to support storylines or discourses; and how these discourses have become part of policy. First we identified the discourses and storylines (using the first two columns of the framework); then we analysed them from the perspective of coalitions and institutional practices to see where they were supported and by whom.

3.3 Knowledge survey

In the second phase of this work, we conducted a web-based survey on the data and information respondents had used for climate change planning and how individuals were connected over the planning process. In Ethiopia, the use of knowledge focused on the development of the green economy and climate-resilient strategies. In Bangladesh, there had not been a similar development within the past two years, so the survey focused on designing and assessing proposals to receive funding under the Bangladesh Climate Change Resilience Fund (BCCRF). Due to time constraints, the survey was not completed in Rwanda.

In each country, we selected respondents for their involvement in the relevant policy process, using purposive sampling to ensure we covered the main institutions in the policy process. This yielded data for

Table 1: Analysis framework for Hajerian storylines (adapted from Hajer 2003)

ELEMENTS OF ANALYSIS	DISCURSIVE ELEMENTS	ACTORS	POLICY SPACES USED	POINT IN THE POLICY CYCLE
Policy discourses	Overarching narrative	Government ministries Individuals Donors		
Policy storylines	Sentence narratives that become shorthand for policy ideas			
Discourse coalitions	Which narratives and storylines are picked up in coalitions or institutional practices from the boxes above?	Which actors are in the coalitions?	Spaces where coalition has influence	Articulation of policy aims Planning Implementation
Institutional practices		Which actors or coalitions have supported this? Which have had power or influence? Which have had contradictions?	What have been the primary policy spaces?	

an illustrative social network analysis and quantitative data on data and information use.

We then used social network analysis (NodeXL software) to visualise the connections between the different policy agendas over the planning process to understand how knowledge flows. We used the in-degree function to identify the information hubs (the number of other respondents identifying a particular organisation as an information source) and betweenness centrality to identify 'connectors', or those who connect others. The betweenness centrality refers to the extent to which a node acts as a bridge between other nodes.

3.4 Limitations

This study has been conducted as an exploratory one, and there are necessarily limitations at this stage. Firstly, the interviews and survey were conducted with a sample of the policymaking community, 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 the analysis covers the range of ideas but cannot claim to represent all views, nor to say how dominant each view is.

The interviews and surveys refer to policy processes that have been unfolding for several years; it is likely that over this time views and ideas have shifted. We have done our best to address this with questions on particular processes, but there may have been some confusion between events over time. The web-based survey tool is also a new research technique in the countries where we used it; respondents may need some time to get used to the style of questions and responses. We used purposive sampling for this, but again, these results can only be seen as illustrative and a stimulus for further discussion and research. Lastly, this is a fast and evolving policy process and new developments have been announced since the interviews and surveys took place. We have tried to reflect these where possible.

4

Planning for a low-carbon, resilient future

Ethiopia, Rwanda and Bangladesh are all categorised as LDCs, and have all initiated national policy processes to address elements of climate change since 2009. This has been partly a response to growing international attention on the issue of climate change, UNFCCC requirements to go through processes such as developing a National Adaptation Programme of Action (NAPA) and Nationally Appropriate Mitigation Actions (NAMAs), the outcomes of Rio+20 and Bali Action Plan, and potential financial incentives. However, these national strategies and frameworks are also separate from international processes and go beyond the approach of a NAPA or a NAMA to consider how they can integrate low-carbon resilient measures into their national planning processes.

Ethiopia

Ethiopia launched a process to develop a Climate Resilient Green Economy (CRGE) initiative in 2010. This process does not mark the beginning of Ethiopia's response to the challenges of climate change: rather, the CRGE vision builds on the policy objectives of the country's National Environmental Policy, its Growth and Transformation Plan (GTP), its NAPA, NAMA and its Programme of Adaptation on Climate Change (FDRE 2011)¹.

The CRGE vision outlines Ethiopia's ambition to build a climate-resilient green economy by 2025. It aims to support the country's development objective of achieving middle-income status by 2025 in a carbon-neutral, climate-resilient way by transforming development planning, investments and outcomes (Fikreyesus *et al.* 2014). The vision is supported by two national strategies – the Green Economy Strategy and the Climate Resilient Strategy. The CRGE strategy has three main objectives: reducing greenhouse gas emissions from different sectors, reducing vulnerability to climate change and ensuring economic growth (Fikreyesus *et al.*, 2014).

The Sectoral Reduction Mechanism (SRM) is being developed to mobilise action for reducing vulnerability and emissions. It will support actors to prepare and mainstream plans that will reduce vulnerability and emissions and coordinate their implementation by identifying and drawing down on financial, technological and technical investment (FDRE 2013). The government has included aspects of these strategies that focus on establishing systems for CRGE planning in its first GTP under a cross-cutting pillar. It has also established a national fund – the CRGE Facility – to receive climate funds and to finance aspects of CRGE strategies. The fund is now operational and has been capitalised by the UK's Department for International Development (US\$23

¹ See Fikreyesus *et al.* 2014 for a discussion of these earlier policy approaches.

million) and Austria (US\$1 million). The facility has already disbursed fast-track finance.

Rwanda

In 2010/2011 the government of Rwanda developed its first integrated LCRD strategy, highlighting a significant level of political will to mainstream climate change mitigation and adaptation into development planning processes and its ongoing commitment to green growth.² The purpose of Rwanda's National Strategy for Climate Change and Low-Carbon Development (NSCCLCD) is to guide national policy and planning in an integrated way; mainstream climate change into all sectors of the economy; and position Rwanda to access international funding to achieve LCRD.

By building on and bringing together existing strategies related to climate change and development, the NSCCLCD provides a framework for a holistic approach to Rwanda's socio-economic development by integrating the country's development agenda with its climate change adaptation and mitigation needs.³ The government hopes to leapfrog old technologies and ineffective and inefficient development pathways by taking a low-carbon path to development and building a green economy (Government of Rwanda 2011). NSCCLCD's vision is for Rwanda to have a developed, low-carbon climate resilient economy by 2050 and outlines three strategic objectives:

- achieving energy security and a low-carbon energy supply that supports the development of green industry and services and avoids deforestation
- achieving sustainable land use and water resource management that results in food security, appropriate urban development and preservation of biodiversity and ecosystem services
- ensuring social protection, improved health and disaster risk reduction that reduces vulnerability to climate change impacts.

The NSCCLCD informed the development of the next iteration of Rwanda's key five-yearly development plan, the Economic Development and Poverty Reduction Strategy 2 (EDPRS 2) in 2013. The EDPRS 2 has made progress in mainstreaming strategies from the NSCCLCD into the development planning framework, particularly in relation to integrated land use planning and management, sustainable small-scale energy installations in rural areas, and low-carbon

urban systems (Nash and Ngabitsinze 2014). Some key sectors, such as agriculture, have also started addressing how to mainstream LCRD into their sectoral strategies.

The government made the decision to pool domestic and external financial resources into a basket fund known as the Rwanda Environment and Climate Change Fund (FONERWA), which was designed to achieve the development objectives of environmentally sustainable, climate-resilient, green economic growth (Government of Rwanda 2014).

Bangladesh

Bangladesh's domestic climate change policies have also developed in recent years. Initially, these reforms were seen as a response to Cyclone Sidr, which struck Bangladesh in 2007.⁴ At that time, Bangladesh's main strategy for dealing with the effects of climate change was its NAPA, launched in 2005 and expanded in 2009. The NAPA document identified 45 adaptation measures, with 18 immediate and mid-term priorities for climate change adaptation. After Cyclone Sidr, both the government and international stakeholders felt a need for a more long-term climate change strategy and so the Bangladesh Climate Change Strategic Action Plan (BCCSAP) was developed. From the outset, it was far more ambitious than the NAPA, recognising the simultaneous need for adaptation and mitigation and emphasising the government's willingness to follow a low-carbon development pathway.

Work on the BCCSAP was based on six thematic pillars, drawn from the Bali Roadmap and it had two phases: 2009–2013 and 2013–2018. Although the BCCSAP is not a costed and sequenced delivery framework, it was anticipated that implementing it would cost US\$5 billion from 2009–2013 (Government of Bangladesh 2010). These funds were expected to come from a diverse range of international and domestic sources, although the specificities were not part of the initial plan. There are two funds to support responses to climate change: the Bangladesh Climate Change Trust Fund (BCCTF) – a domestic, government fund – and the BCCRF. The latter evolved from the Multi-Donor Trust Fund, and is led by the national government in collaboration with the World Bank and contributing development partners, who have roles on the Governing Council and Management Committee (World Bank 2014).

² The development of the National Strategy for Climate Change and Low-Carbon Development was a collaborative effort between the government of Rwanda, the University of Oxford's Smith School of Enterprise and Environment, UK DFID-Rwanda and the Climate and Development Knowledge Network (CDKN).

³ See Nash and Ngabitsinze 2014 for more detail.

⁴ Early discussions about changes to Bangladesh's climate policy in 2008 were referred to as 'post-Sidr planning' (Alam *et al.* 2011). Sidr killed over 3,000 people and directly caused an economic loss of US\$1.7 billion. In the same year, monsoon flooding caused US\$1.1 billion of damage

While each country has taken its own approach to considering climate change in national planning, all three have sought to address mitigation and adaptation concerns through an overarching framework and have set up funding mechanisms to support the financing of these plans.

We now go on to consider the differences in the national policy approaches to LCRD, stakeholder support and consensus around different policy options, and how different countries are building coalitions of support around different approaches. We will then consider what other countries seeking to address LCRD through planning frameworks can learn from these early examples.

5

Approaches to policy synergies

Ethiopia, Rwanda and Bangladesh are taking differing approaches to considering climate change in their national planning, which will provide different incentives and frameworks to bring the agendas together. These range from treating mitigation and adaptation as separate issues (as in a NAPA or NAMA), to merging them within a standalone climate change agenda (as in Ethiopia's CRGE vision), and mainstreaming them into national development planning (as in Rwanda).

Within this process, there may be policies that seek to achieve benefits for mitigation, adaptation and development, and policies that seek to achieve benefits for either mitigation or adaptation within the framework of national development planning. The broad term 'co-benefits' covers any of the areas where two policy responses overlap, but it is clear that there are three types of co-benefit: those within the climate agenda, those within development planning, and those between the three agendas.

All three countries have put new institutions and structures in place to support climate change planning. Governments have sought to draw cross-sectoral support for a cross-cutting issue, maintaining political support and building mechanisms for implementation. These new structures draw on support from national and international experts in aspects of climate change planning. In the following section, we examine the differing institutional arrangements, the policy approach to co-benefits and its relationship to national planning frameworks.

5.1 Role of main policy institutions

Ethiopia

In Ethiopia, a number of institutional mechanisms are in place that may play a role in finding synergies between the green economy and the climate-resilient agendas. For example, the CRGE Inter Ministerial Steering Committee, under the Council of Ministers, is a cross-sectoral committee that sets priorities and funding criteria; the CRGE Management Committee – a standing committee of senior representatives from line ministries and the National Planning Commission – has oversight over the initiative and the mandate to ensure it aligns with the GTP (Government of Ethiopia 2014).

Both these committees have a potential role to play in how synergies or alignment are developed through the strategies and the SRM, a system to reduce vulnerability and emissions with the explicit aim of mainstreaming green growth and resilience into development planning and ensuring efforts are aligned and coordinated. Implementing entities such as line ministries and regional governments are responsible for preparing CRGE investment plans known as the Sectoral Reduction Action Plans (Fikreyesus *et al.* 2014), which form part of the SRM. The SRM covers planning, review, quality assurance, finance allocation, and the monitoring and evaluation of investments. The

Table 2: Policy institutions involved in LCRD, by country

COUNTRY	MAIN CROSS-SECTORAL ARRANGEMENTS	FINANCING MECHANISMS	POLITICAL WILL	IMPLEMENTATION ARRANGEMENTS
Ethiopia	<p>Technical committees responsible for preparing green economy and climate-resilient strategies</p> <p>CRGE Inter-Ministerial Committee</p>	<p>CRGE Facility: overseen by the ministerial and CRGE management committee.</p> <p>Ministry of Finance and Economic Development (MoFED) manages overall activity in close collaboration with Ministry of Environment and Forest (MEF).</p>	<p>Ministerial committee chaired by Prime Minister's Office</p> <p>Key ministers also involved.</p>	<p>Line ministries and regional governments (implementing entities) and non-state actors (executing entities) through access to CRGE Facility funds</p> <p>CRGE secretariat</p>
Rwanda	<p>Technical committee</p> <p>Sector Working Group</p> <p>FONERWA Management Committee and Technical Committee</p>	<p>National Fund for Environment and Climate Change (FONERWA)</p> <p>Governance includes FONERWA Management Committee, Technical Committee and Secretariat</p>	<p>Prime minister involved in strategy</p>	<p>Implementation through access to multiple funding windows of FONERWA.</p> <p>Line ministries and government agencies, civil society organisation, districts and private sector all eligible.</p> <p>Climate change and international obligations unit in the Environmental Management Authority (REMA). Focal points in line ministries.</p>
Bangladesh	<p>National Environment Committee</p> <p>National Steering Committee on Climate Change</p> <p>Governing Council of the BCCRF</p> <p>BCCTF Trustee Board, including members from a variety of sectors</p>	<p>BCCTF, governed by board of government stakeholders including ministers and secretaries</p> <p>BCCRF Governing council includes government and donor representatio</p>	<p>Ministers of BCCRF governing council involved</p> <p>BCCTF Trustees</p> <p>Planning Commission</p> <p>More political support for adaptation</p>	<p>Implementation through application to the funds, including line ministries, national non-governmental and civil society organisations</p> <p>Three main implementing ministries receive the most funds: Water board, Local Government Engineering Department (LGED) and national disaster management ministry</p> <p>Climate Change Unit sits within the Ministry of Environment and Forest</p> <p>Climate change focal points in ministries.</p>

CRGE Facility Secretariat's finance team will play a particularly important role in guiding a merged agenda: it has responsibility for results-based monitoring and evaluation, so will determine whether investment outcomes are defined through co-benefits. It is also responsible for resource mobilisation; but the type of funds will affect how they are implemented.

Bangladesh

In Bangladesh, funding for implementation comes mainly from the two funds – the BCCTF and the BCCRF. There are focal points for cross-sectoral coordination in line ministries, the National Environment Committee and the National Steering Committee on Climate Change (see Rai *et al.* 2014). Line ministries, national non-governmental organisations (NGOs) and civil society organisations can implement programmes by applying to the funds in a competitive process.

Within the BCCTF, the Trust Fund Board approves projects and decides where to invest, under guidance from several technical committees that including representatives from government and civil society. The BCCTF's objectives state that adaptive capacity will be built "by improving livelihoods" and that the fund will address both climate change adaptation and mitigation.

The BCCTF also supports BCCSAP's development priorities and tends to fund specific sectoral areas, which make up two-thirds of the total allocated funding (Government of Bangladesh 2012). Mitigation and low-carbon development projects receive 20.21% of total funds (Rai *et al.* 2014).

The BCCRF's goal is to support the implementation of the BCCSAP, and its structure follows the BCCSAP themes. Because climate mitigation and low-carbon development are separate themes within the BCCSAP, this funding structure may not fully support the merging of agendas. But even when projects funded under specific funds – such as afforestation, solar energy or solar irrigation – do not explicitly offer the potential to address co-benefits, they often do so implicitly. For example, one of the largest BCCRF-funded projects, costing US\$60 million and funded by the BCCRF, the World Bank, private sources and the Infrastructure Development Company Limited (IDCOL – a state-owned financial institution), will install solar-powered irrigation pumps over 17,000 hectares of rural Bangladesh. So, although there is no explicit policy around merging the agendas in Bangladesh, projects like this one have development co-benefits despite being classified in different pillars within the BCCSAP.

Rwanda

In Rwanda, different public institutions share the responsibilities for developing policy around LCRD and mainstreaming strategies. Two of the key ministries are the Ministry of Natural Resources (MINIRENA) and the Ministry of Finance and Economic Planning (MINECOFIN). The Rwandan Environmental Management Authority (REMA) operates under MINIRENA and has been designated as the lead authority on climate change and plays a statutory role in coordinating, regulating and supporting Rwanda's national response to climate change.

REMA has created the Climate Change and International Obligations Unit (CCIOU), which is responsible for coordinating the preparation and implementation of policy, strategy, regulatory frameworks and instruments relating to climate change mitigation and adaptation. The CCIOU has prepared a number of sector-specific guidelines to encourage and facilitate the process of mainstreaming climate adaptation and mitigation. Each prioritised sector has been assigned a ministry as a lead agent to help integrate climate change concerns in all policy processes by working with local governments and other relevant state and non-state institutions. Each ministry also has a designated climate change focal point.

REMA also houses FONERWA's Fund Management Team, which operationalises and manages the fund's day-to-day activities. MINECOFIN is responsible for planning, coordination and budgetary oversight of FONERWA, which allocates funds through four thematic windows, including mainstreaming environment and climate change into planning.

Across the three countries, institutional arrangements for policy implementation, financing and cross-sectoral coordination offer different incentives to align or merge policy agendas. National climate funds in all three countries provide a source of finance for implementers – often line ministries, local governments and NGOs – to apply to implement aspects of the national policies.

- In Rwanda, they are mainstreaming both agendas, so focus on institutional and financial support.
- In Ethiopia, they will fund the implementation of investment plans that deliver CRGE objectives.
- In Bangladesh, both the multi-donor trust fund and government-owned fund support the BCCSAP. The funds finance both adaptation and mitigation, often with strong development co-benefits, but there is no explicit aim to merge the agendas.
- The structures and funding modalities of these national funds therefore play a key role in how the agendas will be merged in different areas and the incentives for implementing entities to do this.

Governments in all three countries have mechanisms to coordinate the climate change agenda, these are often units or focal points in the environment ministry or in line ministries. These units and focal points will play an important role in the way the agenda is merged or mainstreamed into implementation. It is also interesting to note the use of new actors, such as IDCOL, civil society and local government, in implementing aspects of the agenda. They will bring their own incentives and priorities to the process and will play a role in the way the agenda is brought together in practice.

5.2 Co-benefits through policy and institutional approach

While institutional arrangements and priorities differ, all three countries include some mention of co-benefits – areas of mutual benefit between adaptation and mitigation/low-carbon agendas, and/or between aspects of the climate change agenda and national development planning priorities.

Within the policy documents and strategies, each country identifies its co-benefits in its overarching vision or discourse, but the policies moving to implementation have little detail on how the co-benefits will be realised in practice, for two reasons. First, because policies are often developed sequentially, it is difficult to find co-benefits as policies develop. Second, because implementation has been sectoral, co-benefits may not fit within one sector or within sectoral priorities.

Ethiopia

In Ethiopia, the policymaking process has not fully supported the development of synergies between low-carbon and resilience agendas, and the overarching narrative is one of aligning the agendas. Although the CRGE vision sets the overall goals, it will be delivered by a set of strategies, which include: the green Economy Strategy (the first to be developed) and the Agriculture Climate Resilience Strategy (draft). The latter acknowledges the need to appraise options with both low-carbon and climate-resilient growth, but is not clear on how these factors have been included in the selection of measures.

The Green Economy Strategy does not consider a given initiative's potential to build resilience of vulnerable regions and sections of society or its vulnerability to the effects of climate change as a separate criteria. Rather, these are implicit in the plan.

The potential to contribute to GTP targets could be regarded as a criterion through which resilience considerations have influenced the prioritisation outcome. The GTP targets that are taken into account are: impact on poverty reduction; food security; increase in real GDP; increase in domestic capital formation; increase in exports; and benefit to public finance. New mechanisms and guidelines are being developed to offer more explicit support on what is means to merge the two climate agendas. The SRM will help by providing technical and financial coordination for both the preparation and the implementation of Sector Reduction Action Plans (Government of Ethiopia 2014).

However, there is an increasing high-level commitment to finding development co-benefits with both agendas. The GTP clearly outlines building a CRGE as one of the key policies for developing long-term sustainability in the context of climate change, and so identifies co-benefits between the climate and development agendas. The plan also identifies objectives, targets and implementation strategies that the government will pursue in a bid to reach their goal of building a CRGE. The government plans to further integrate CRGE into its next five-year development plan, the GTP II.

Finding co-benefits in Ethiopia, then, seems to have been initially about finding synergies between mitigation and adaptation (climate co-benefits). Initially sequential processes meant it was difficult to realise co-benefits in the CRGE planning process, but this may be addressed through more guidance such as Sector Reduction Action Plans. There is high-level commitment to move towards mainstreaming and development co-benefits.

Rwanda

Rwanda has high-level commitment to integrating climate mitigation and adaptation to national priorities, with a focus on any development co-benefits rather than co-benefits between the agendas. The vision outlined in its NSCCLCD has three strategic objectives around energy security and low-carbon energy supply; sustainable land use and water resource management; and social protection, health and disaster risk reduction.

To achieve the vision and these objectives, the NSCCLCD details 14 programmes of action that cut across multiple sectors. The government's approach is to mainstream these areas into national plans and sectoral strategies. There are guidelines to support line ministries with mainstreaming climate change into their planning. There are potentially strong links between the Green Growth Strategy and the Strategic Plan for Agriculture Transformation – these are reflected under a programme of institutional development and agriculture cross-cutting issues. This programme recognises the need to mainstream environment and climate change

as a strategy to foster sustainability in the agriculture sector. Key proposed areas for mainstreaming include soil conservation, pesticide hazard reduction and water management. This suggests that the Rwandan approach to co-benefits is seeking to find overlap with development priorities.

Bangladesh

In Bangladesh, policy narratives have evolved over time from not recognising climate mitigation as a priority issue, to becoming more inclusive of low-carbon growth, to purposefully integrating climate change adaptation and mitigation into government strategy. This is particularly the case for strategies written by the Planning Commission – for example, the 6th Five-Year Plan, the Perspective Plan and the National Sustainable Development Strategy.

While energy for development has been a long-standing priority, according to government policy, it should be achieved through a low-carbon development strategy which is subject to available funds and appropriate technologies. However, there is now a strong discourse that puts climate change adaptation as the major policy priority in Bangladesh. Policies and plans from the Ministry of Forests and Environment and the Planning Commission best demonstrate a gradual shift to integrating the LCRD agendas. While earlier policy documents such as BCCSAP treated adaptation sequentially – adding low-carbon growth actions only when strategic to do so – later documents such as the National Sustainable Development Strategy (2013) acknowledge the importance and benefits of a consciously integrated approach.

Few of the policies explicitly mention the potential for co-benefits to be realised by merging the climate change adaptation and mitigation agendas. The Climate Management Plan for the Agricultural Sector (2009) was the first of the surveyed document to note the importance of actively looking for these synergies and win-win scenarios. This is translated into tangible practical actions in later documents – for example, the National Sustainable Development Strategy states that the “afforestation program should be strengthened to take advantage of its effect on disaster risk reduction and climate change mitigation” (Government of Bangladesh 2013, p127). The BCCSAP has separate

pillars for adaptation and mitigation and so has retained a separation of the issues. Although undertaking low-carbon development was not mentioned in earlier strategies, Bangladesh has implemented many activities and projects to attain energy security which have also contributed to mitigation – for example, work on reducing system losses from transmission and distribution of energy.

Each country identifies the need to find co-benefits, but they are seeking to achieve them in different ways. Ethiopia is using one agenda as part of the prioritisation criteria for selecting measures in another area. Bangladesh includes both adaptation and mitigation in overarching discourses while largely maintaining separation in implementation. Finally, Rwanda is mainstreaming both agendas through line ministry priorities wherever possible.

This also reflects the different emphases countries place on where they look for co-benefits, whether it is in bringing together low-carbon and resilience issues or in development overlaps:

- In Ethiopia, the green economy agenda has a very specific goal of greenhouse gas emission abatement. The government developed this strategy first, identifying measures through a prioritisation exercise referred to national development goals such as poverty reduction but did not include climate-specific resilience measures. They developed these later and it is unclear how abatement potential has influenced the prioritisation of measures.
- Bangladesh has a variety of positions across government policy development, with an overarching narrative of low-carbon resilience beginning to emerge in some areas. Implementation through the BCCRF and BCCTF has remained largely separate, although projects often have implicit benefits in other areas. Some policies have been implemented in the energy sector, but these have not been explicitly about climate mitigation.
- Rwanda is currently focused on mainstreaming adaptation into planning, but in principle both agendas can be mainstreamed where they align with national priorities. This places the emphasis on the co-benefits with other national priorities rather than co-benefits between the agendas.

6

Building coalitions for implementation

There is a diversity of views on what LCRD means in practice and how co-benefits might be found between mitigation, adaptation and development agendas. While this is to be expected in a newly emerging policy area, the way in which coalitions are forming around the different ideas will play a role in the support they get to move from the planning to implementation stage. In all three countries, stakeholder groups – including those from different parts of government – expressed a diversity of views ranging from considering low-carbon and resilience objectives as separate policy agendas, to considering them to be complementary.

Table 3: Cross-country understandings of LCRD

STORYLINE	MEANING	ETHIOPIA	BANGLADESH	RWANDA
No need for low carbon	Adaptation is a national priority, mitigation is not a national issue		Some political figures, civil society.	
Separation	Adaptation and mitigation are separate issues, with no linkages	Some government ministries	Civil society; development partners, eg IDCOL	Some government ministries and agencies; private sector
Sequential	Adaptation continues to be a priority, but low-carbon growth should be added sequentially over time	Some development partners	Government bodies linked to the environmental sector	Some government ministries and agencies; private sector
Alignment	Doing the agendas in parallel, not necessarily with overlap or synergies	Some government ministries	Government bodies linked to the environmental sector; research and think tanks	
Co-benefits	Prioritise those actions that have common mitigation and adaptation benefits (co-benefits) while not curtailing development	Some government ministries, agencies and international organisations	Government bodies linked to the environmental sector; research and think tanks	
Complementarity	Agendas indirectly support each other	Some government ministries, research institutions and development partners		Government ministries and agencies; international organisations; development partners
Complexity	Unclear distinction between the complex agendas, so they are implemented together			Government ministries and agencies; international organisations; development partners
Low carbon as a feasible approach	Low carbon is a growing priority and a more feasible option than building resilience		Ministries linked to power generation and energy	
Leveraging	Brought together in an in-depth way to create better outcomes	Some government ministries		
Integration	Integration of adaptation and mitigation into policy and actions		Development partners	Government ministries and agencies; international organisations; development partners
Long-term sustainability	Implementing resilience and low-carbon objectives together leads to mutual socioeconomic and environmental benefits	Some government ministries		Government ministries and agencies; international organisations; development partners

Ethiopia

In Ethiopia, many government stakeholders explained that at the beginning of the policy process on the CRGE, nobody knew what green economy meant and it took time to understand the terms they were using. There are still many ideas around what the concept actually means – stakeholders brought up four main issues, which were: alignment, complementarity, separate issues and leveraging/co-benefits between the agendas. Although these views are similar, they suggest slightly different ways of bringing the agendas together. Sometimes individuals expressed more than one of these views. These ideas represent a spectrum of engagement between the agendas – from separation, to aligning agendas over time with no necessary synergies, to indirect benefits (complementarity), to more in-depth synergies.

Stakeholders also considered leveraging better outcomes as a potential outcome of LCRD, suggesting some support for a more transformative agenda. Some of these storylines also occurred together – such as those seeing complementary alignment of the CRGE agenda. Government stakeholders had a range of views on the issue and there was no coalition around what this means in practice. The greatest consensus was among international organisations and development partners, who all saw a need for a complementary and leveraging approach to bring about better outcomes. Private sector stakeholders understood this as part of corporate social responsibility, a view that was not shared by others. The research organisations had a more technical understanding of differences of scale in the agendas. Tables 4, 5 and 6 illustrates the stakeholder views gathered from the interviews, by country.

Table 4: Stakeholder views, Ethiopia

STAKEHOLDER GROUP	WHAT DOES BRINGING TOGETHER LOW-CARBON DEVELOPMENT AND RESILIENCE MEAN IN ETHIOPIA?
Government ministries	<ul style="list-style-type: none"> • Both agendas complement each other • The agendas should be aligned and implemented in a parallel way to leverage better outcomes • There is no clear separation between the agendas • There are no agreed definitions, so it's difficult to bring them together
Research organisations, experts and consultants	<ul style="list-style-type: none"> • The green economy is mitigation; resilience is adaptation: they are separate, but related agendas • The green economy is a global issue; resilience is local and sectoral
International institutions and development partners	<ul style="list-style-type: none"> • There is no clear separation between the agendas: they can be implemented together • This is just good development • They need to feed into each other before implementation • There are differences in international responsibility and national priority between these agendas • They need to be implemented simultaneously
Private sector and civil society	<ul style="list-style-type: none"> • The green economy and climate resilience are part of a broader picture of corporate social responsibility • This must come together at the planning and implementation stage.

Rwanda

In Rwanda, stakeholders also emphasised the close relationship with environmental issues and sustainability: this is what they considered a transformative low-carbon resilient agenda would look like. Rwandan stakeholders saw LCRD as a new agenda. As such, it has not yet been translated into some stakeholders' plans and interventions. For the majority of stakeholders, bringing together climate-resilient and low carbon development requires working on awareness to increase the understanding of different stakeholders involved in planning and implementing the country's priorities. While some stakeholders suggested that there is no need to address the two issues together, others considered it very important for sustainability to keep and address both objectives together.

Table 5: Stakeholder views, Rwanda

STAKEHOLDER GROUP	WHAT DOES BRINGING TOGETHER LOW-CARBON DEVELOPMENT AND RESILIENCE MEAN IN RWANDA?
Government ministries and agencies	<ul style="list-style-type: none"> • Rwanda needs to prioritise climate resilience first and think green economy later • Rwanda's economic transformation will result in reasonable levels of pollution in the short term • As a poor country, Rwanda does not pollute, but is a victim of pollution by the rich world. As such, implementing green economy initiatives will not help much in the short term • There is high complementarity between climate resilience and low-carbon development • Due to high interconnectivity between the two concepts, the same interventions cut across the two issues • The demarcation between climate resilience and low-carbon development is unclear: they should both be implemented together through current national initiatives
Private sector and civil society	<ul style="list-style-type: none"> • For Rwanda to preserve its past achievements and meet its long-term development targets, climate resilience and green economy should be implemented together • Implementing climate resilience and low-carbon development together leads to mutual socioeconomic and environmental benefits • Addressing both issues together is contributing to global social responsibility
International organisations and development partners	<ul style="list-style-type: none"> • They provide a strategy to consolidate the development that Rwanda has already achieved • They help reduce people vulnerability to climate change • Through them we can plan for Rwanda's sustainable growth and development • We can use them to think ahead and project environmentally friendly development.

Bangladesh

In Bangladesh, several conflicting storylines emerged. Some felt no real need for low-carbon development in a poor country like Bangladesh, others saw it as a feasible approach to address some of Bangladesh's energy needs, while others thought it more achievable than resilience. Government stakeholders across different individuals and ministries held a range of views on the issue, coalescing around two diverging storylines and forming two distinct coalitions:

- Government actors linked to environment ministries generally prioritised adaptation, but some also saw a need to sequentially and gradually add mitigation actions over time. They saw the need to prioritise common actions that bring co-benefits to meet global commitments, a view shared by some think tank experts who were involved in planning and designing Bangladesh's climate change plan.
- Government actors from the energy community, who are often linked to the private sector and development partners, saw low carbon as a priority and a more feasible option than resilient development. They also stressed the need to address various barriers and political biases, a view shared by the private sector and some NGO stakeholders, who also emphasised a need for global financial and technological support to prioritise low-carbon development.

There was some consensus among international organisations and development partners, who saw low-carbon and resilience as separate from each other, with both requiring dedicated policy and actions. Some development partners, however, saw the need to integrate the two agendas into policy and actions. Civil society had their own understanding of this, with some actors viewing LCRD as a global imposition on developing countries.

Table 6: Stakeholder views, Bangladesh

STAKEHOLDER GROUP	WHAT DOES BRINGING TOGETHER LOW CARBON AND RESILIENCE MEAN IN BANGLADESH?
Government ministries	<ul style="list-style-type: none"> • The two agendas are important, but adaptation is a higher priority; mitigation actions should come gradually • Low carbon is a priority. Implementing low-carbon actions is easier than building resilience, but barriers need to be removed • Mitigation is not our primary national responsibility; but actions to achieve common adaptation and mitigation objectives will allow adherence to our global responsibility/commitment • Mitigation would be sidelined if addressed in same policy as adaptation, such as BCCSAP
Research organisations, experts and consultants	<ul style="list-style-type: none"> • Low carbon is mitigation; resilience is adaption. There is growing acceptance for mitigation, but adaptation continues to be the first priority • Low-carbon development should complement, not compromise, traditional development pathways
International institutions and development partners	<ul style="list-style-type: none"> • The low-carbon concept is evolving, but both adaptation and mitigation need to be integrated within both policy and actions • There is clear separation between the mitigation and adaptation agendas • We do not see mitigation and adaptation happening together because they are totally separate and different
Private sector and civil society	<ul style="list-style-type: none"> • Mitigation is a global issue and adaptation is more local and urgent • Mitigation is a political issue and an imposed concept • Low carbon actions should not compromise or divert funds away from a much-needed adaptation priority.

There is, therefore, a wide variety of views and understanding of what LCRD means both within and between countries. In Bangladesh, environment ministries and power-related ministries are forming coalitions around separate storylines, whereas in Ethiopia views are still very diverse and there is little evidence of coalitions forming around particular perspectives. Rwanda shows a diversity of views across stakeholder groups, although these are broadly within the discourse of long-term environmental sustainability.

Although there are many similarities across the three countries in the way stakeholders are considering what it means to bring together LCRD, there were also specific national issues associated with LCRD in each country. These are important elements to consider when supporting or working with a low-carbon resilient agenda in different contexts:

- In Bangladesh, there were many specificities to the debate including: the over-riding discourse of adaptation as the priority, concerns of national agenda ownership, energy security considerations and effective targeting of the poorest people.
- In Rwanda, the climate change agenda has become closely associated with broader environmental sustainability.
- In Ethiopia, it has become linked with transforming the economy and greenhouse gas abatement.

In each case, national issues and the new policy agenda have coincided to emphasise aspects of the agenda to generate national interest and political will.

When a policy has a supporting discourse coalition, there is a group of stakeholders with similar understandings and priorities seeking to move this policy approach forward, define it and start implementation. When coalitions are more diffuse around different storylines, there is little shared understanding – for example, to generate a unified approach to co-benefits. Understandings around a LCRD agenda are often diffuse, particularly around the mechanisms and approach to co-benefits.

This diversity of views of what the agenda means in each context suggests that the agenda is still emerging and coalitions and consensus are still developing. Some variety will probably remain, but if key policy areas are to be moved to implementation, there will be a need for greater consensus across actors who will need to work together to decide the to be taken in each sector or context. One way to develop this may be further debate across government to consolidate ideas and develop a national approach with wider national ownership.

7

Motivations for LCRD

There is a wide range of incentives to addressing LCRD in national planning, and we found strong stakeholder consensus between the countries on the overwhelming incentives to access climate finance and support existing national priorities through the co-benefits of an approach such as LCRD:

- In Ethiopia, stakeholders talked about using an agenda such as LCRD to be more ambitious with their national agenda, tying in with the storylines around what LCRD means in Ethiopia, which included the possibility of it leveraging greater outcomes.
- In Bangladesh, some stakeholders still emphasised that low-carbon elements of the agenda must be funded through external sources. This highlights the real incentives around resilience and the potential for low-carbon objectives to be combined with resilience where there is external support.
- Rwandan stakeholders considered incentives for low-carbon resilience to be closely linked to their broader environmental sustainability agenda.

It is important to note that, while some of this national planning has emerged through a variety of incentives including national priorities and concerns of leadership and international status, the motivations identified across all contexts are climate finance and the co-benefits agenda. This highlights two things. First, that

ideas from the UNFCCC and associated climate funds are important in generating innovative planning at the national level; continuing visible progress on that front will support continued national action. Second, while the co-benefits agenda is a key incentive, exactly what these co-benefits are, and how to best identify and implement them is still a topic for debate. To support continued development, there must be further research and exchanges about the co-benefits agenda, to ensure lessons are learned and shared as they emerge.

This issue of how much the agenda is nationally or internationally driven has also been important within national debates and among stakeholders. It is therefore an important area to consider in incentives for this type of planning. According to many government stakeholders in Bangladesh, policies to achieve LCRD are national initiatives and not externally driven. They feel that Bangladesh is a small contributor to global emissions and the country therefore does not receive much external pressure to undertake mitigation actions. Instead, issues such as energy scarcity are the main drivers for national initiatives towards LCRD. These priorities are reflected in national policy reforms, the allocation of government resources for low-carbon and adaptation programmes and the setting up of institutions – such as BCCTF and the Climate Change Trust – to coordinate these actions.

Table 7: Cross-country incentives for LCRD

COUNTRY	ACCESSING CLIMATE FINANCE	SUPPORTS NATIONAL PRIORITIES WITH CO-BENEFITS	NATIONAL STORYLINES
Ethiopia	Yes	Yes	<ul style="list-style-type: none"> • More ambitious policies • Leadership role • Global responsibility
Rwanda	Yes	Yes	<ul style="list-style-type: none"> • Broader environmental sustainability • Need to follow own path
Bangladesh	Yes	Yes	<ul style="list-style-type: none"> • Low carbon must be funded through other means

Table 8: Storylines around ownership of the LCRD agenda in Bangladesh

STORYLINE	MEANING	STAKEHOLDER
National government leadership	National government is putting their own funds into the agenda and leading with a policy framework to transition slowly to a low-carbon resilient economy based on national incentives such as energy security	Government officials Development partners Civil society
Lack of national direction and motivation	Bangladesh has led on adaptation, but there is a lack of direction and political will around low-carbon pathways	Development partners Some government stakeholders (for example, IDCOL) Civil society
Needs wider leadership	Some incentives do not support whole society involvement in the agenda. The process needs to be broadened beyond just policy leadership to all sectors and scales	Civil society International organisations

8

Using and sharing knowledge for LCRD

Beyond the policy storylines and discourses that shape choices and planning around climate change, stakeholders' knowledge base and their access to new forms of knowledge are also an important aspect of the political economy of the planning process in an emerging area. In this section, we consider the knowledge and information that policymakers and others needed to shape policy responses, where it came from and how they shared it. We then discuss how these findings on knowledge support our understanding of the planning processes and the policy discourses.

8.1 Use and sources of knowledge

Stakeholders need to find new information and knowledge to address some of the challenges of climate change planning, and use a range of formal and informal sources to do this. Stakeholders in both countries rely quite heavily on informal exchanges and internet-based reports and websites to get the information they need. The graphs below show that stakeholders in Ethiopia and Bangladesh needed new technical information, although they also applied existing policy and institutional knowledge.

In Ethiopia, respondents needed similar amounts of information for policy development in the green economy and climate resilience. International experience on climate change and technical information on climate change projections were key information sources.

In Bangladesh, respondents needed new information on technical aspects of climate change, models and raw data sets to assess proposals.

It is clear that policymakers need new forms of information and knowledge to meet the challenges of climate change planning. Figure 3 shows that in Ethiopia, they relied more on commissioned research existing information for climate-resilient planning compared to green economy strategy development. Both planning processes got information from formal committees and informal exchanges with colleagues, highlighting the importance of existing social networks in passing information.

In Bangladesh, people used informal sources of background information to help develop and review proposals, as well as published reports and websites.

Policymakers mostly used the sources that were most readily available to them and those they could access through informal channels. This raises some questions about the quality and breadth of the information available for policy development. The results also show that the policy areas of climate resilience and low-carbon development require different sources of information; if synergies are going to be developed between the two, it is also important to consider how knowledge about one informs the development of the other.

Figure 1: Information needed for policy planning in Ethiopia

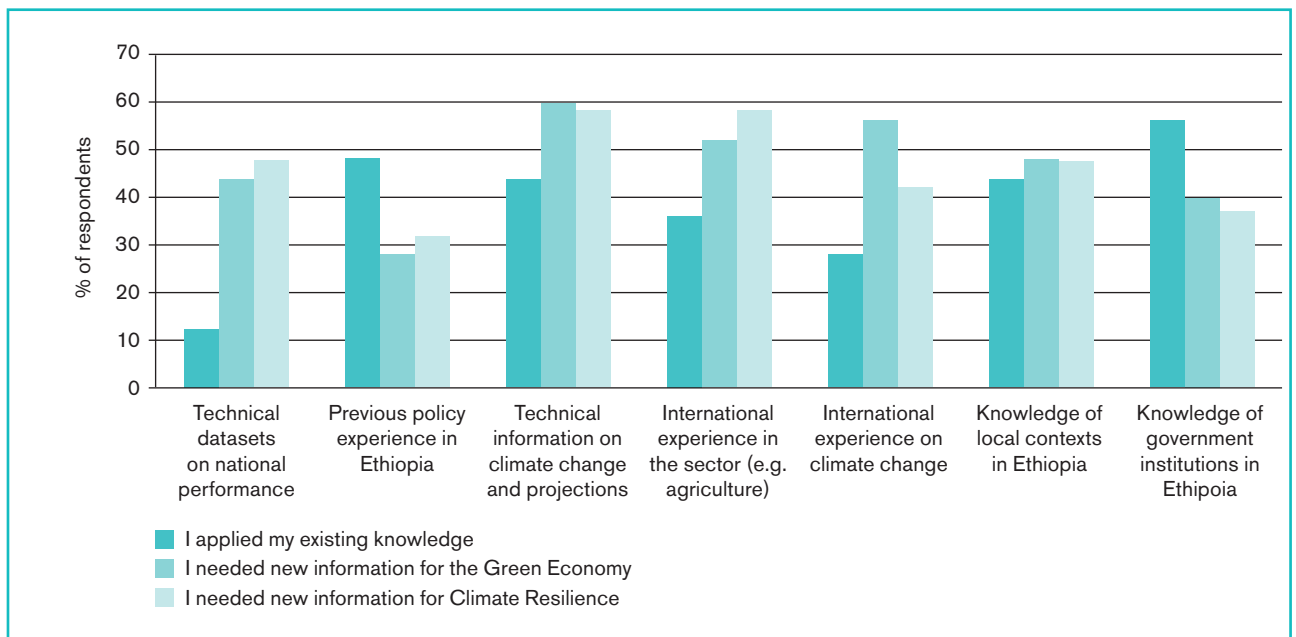


Figure 2: Information needed to develop or review funding proposals in Bangladesh

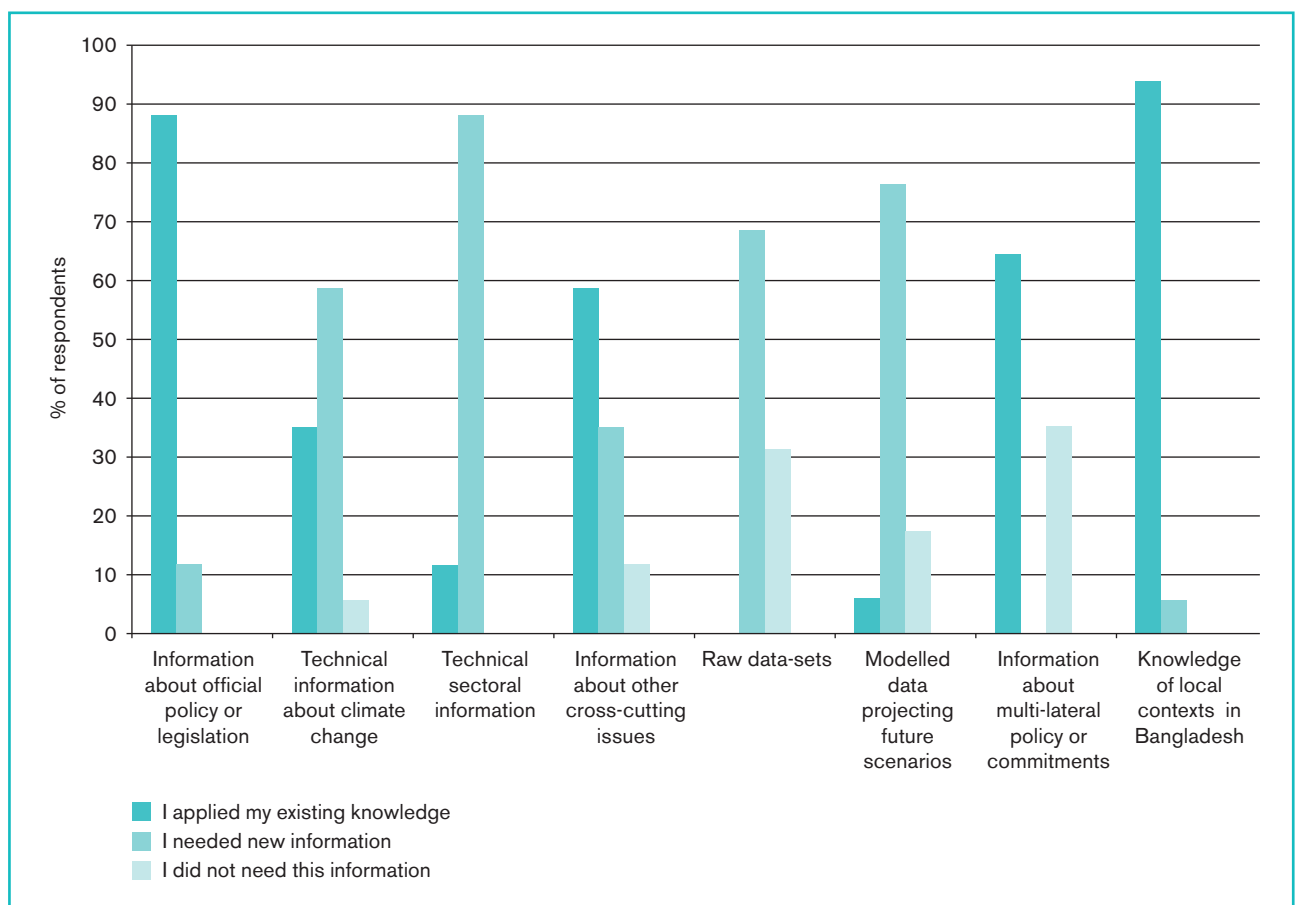


Figure 3: Sources of information and knowledge in Ethiopia

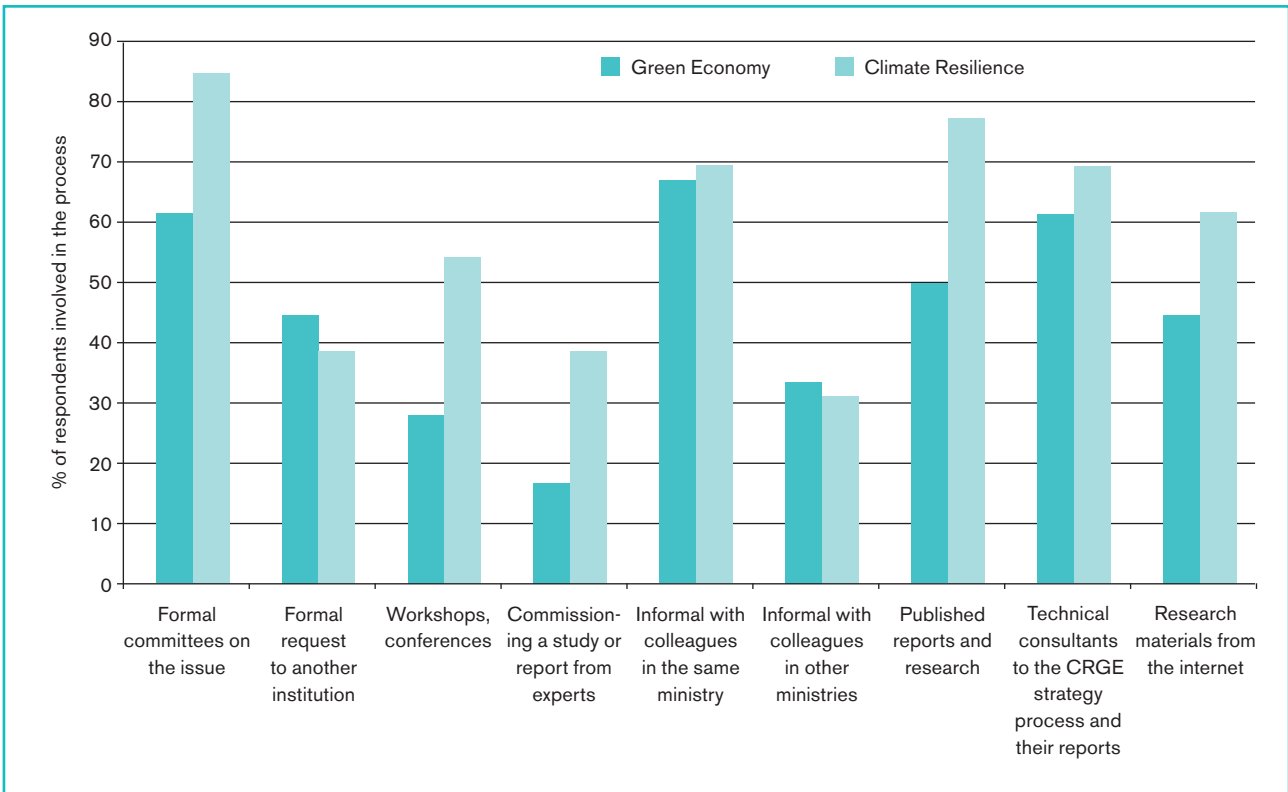
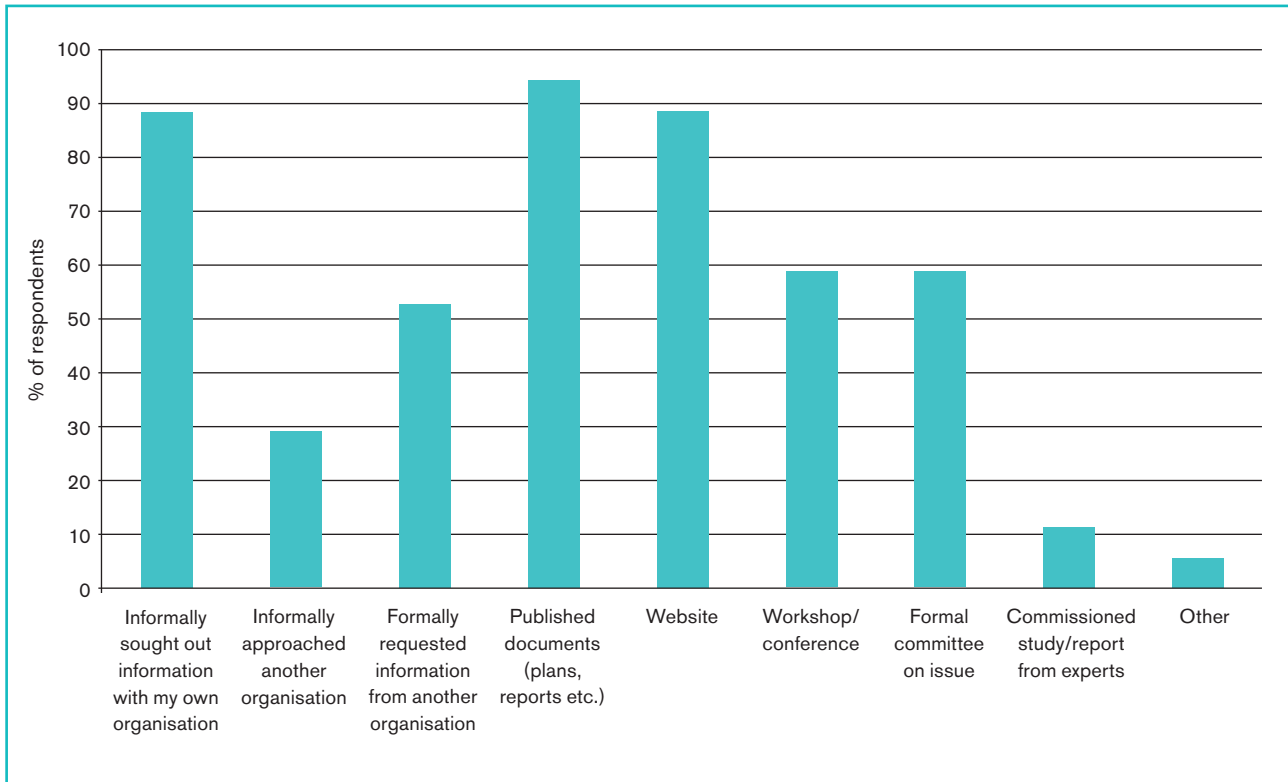


Figure 4: Sources of information and knowledge in Bangladesh



8.2 Knowledge flows

It is important that policymakers have the information they need, and can access background knowledge on other areas if necessary. Survey results show that certain key actors or organisations act as information hubs for others, holding most of the information on the issues. Figure 5 shows that in Ethiopia, green economy consultants, the Ministry of Water and Energy and the Ministry of Agriculture act as information hubs for the green economy and illustrates how they connect others. The direction of the arrow indicates the direction of the knowledge flow – technical consultants and the Ministry of Water and Energy were clearly the primary sources of background knowledge for others in the network. They are shown in red in the diagram below.

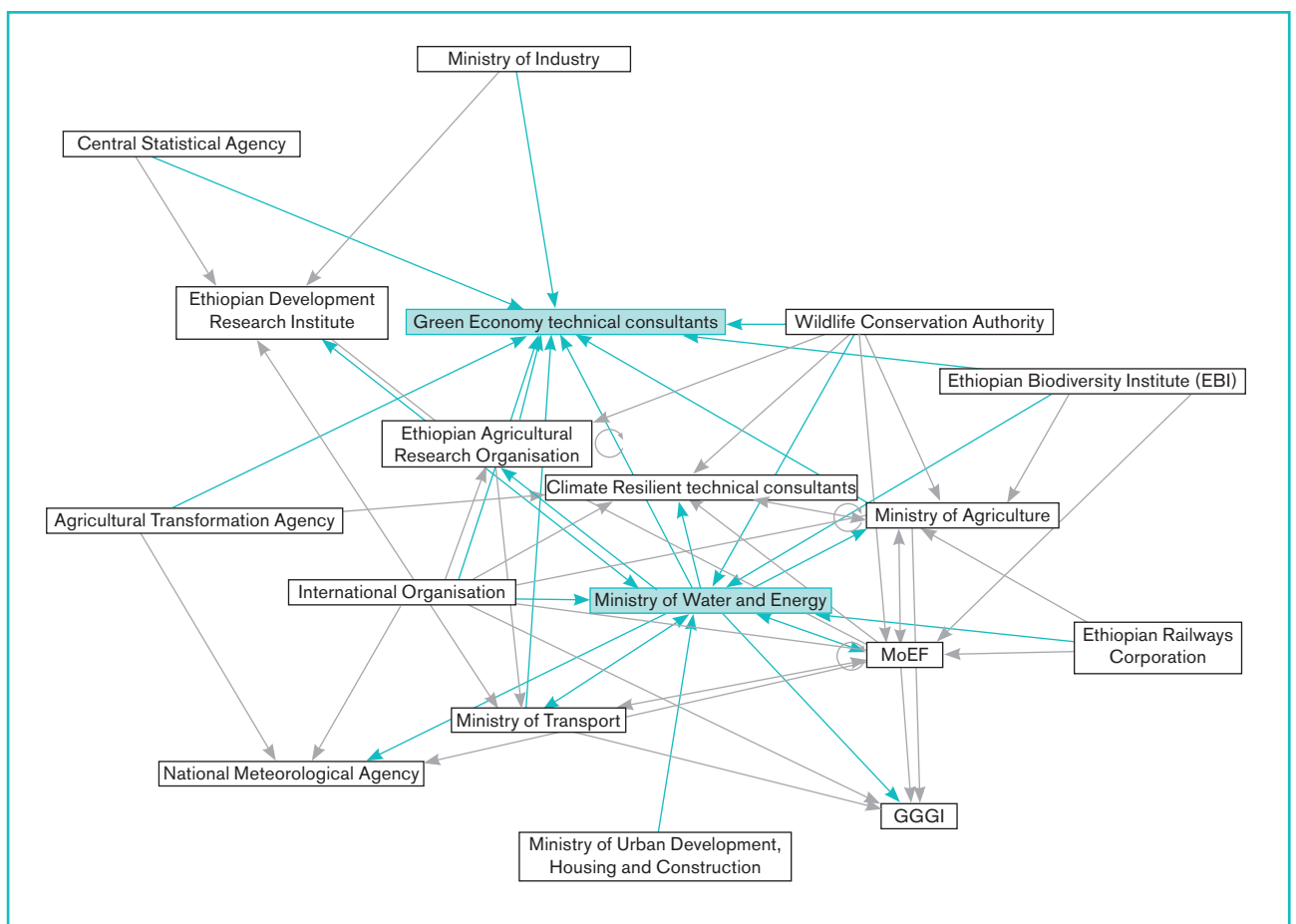
The climate-resilient policy process had fewer key information hubs and knowledge seemed to be more diffuse in the network, although consultants and key line ministries again played an informational role.

In Bangladesh, a wider range of actors was involved in giving out data and information for proposal development and review. Some of these were only consulted occasionally, but a significant number – including the World Bank, sub-national government, the Ministry of Environment and Forests and the Department of Environment – emerge as the main sources of background information for others on the issue.

8.3 Knowledge and discourse shaping policy

Government policymakers and other stakeholders need new information and knowledge to plan for climate change, and the choice of that information is partly a political one, shaped by storylines of what the agenda is in practice and how it should be implemented. This need for new information for both agendas highlights the fact that it is an emerging policy area.

Figure 5: Illustrative network map of hub and connector organisations for the green economy, Ethiopia



Policymakers needed access to new information around technical data on climate change models, impacts and sectoral data. In Ethiopia, technical information on climate models was the most widely required, while in Bangladesh policymakers needed technical data – on climate science and individual sectors – rather than information on policy approaches and international experience.

We see, therefore, that the knowledge feeding into the process is highly technical, but at the same time, our analysis of policy and institutional mechanisms shows a lack of clarity on how and where to find co-benefits. This gap indicates a need for more knowledge on policy approaches. Reeder and Ranger (2010) highlight the difference between science-first and policy-first approaches. The former generates or interprets climate projections, analyses their impacts and then designs and assesses adaptation options using the available information and data sets to form the context for the policy problem. In a policy-first approach, the policy problem is the key area of analysis and policy options are assessed against a detailed set of projections and other inputs. The emphasis we have seen here on technical data suggests that these three countries are focusing on a science-first approach when the context of great policy uncertainty and the need for innovation and new approaches might better support a policy-first approach.

The results also showed that information sources tended to be those that were easily available – internet-based sources, colleagues and in the case of Ethiopia, formal committees. This adds an extra dimension to the way policy and planning decisions are shaped: if they are based on the pool of knowledge that is circulating already, they are more likely to draw on existing approaches and analysis rather than take a new approach to particular co-benefits. This is supported in the storylines analysis, where very few stakeholders coalesced around a belief in transformative change or leveraging greater outcomes by merging policy agendas. Instead, most saw the issues as somewhere between complementary and co-beneficial.

In Ethiopia and Bangladesh, respondents indicated that informal contacts were an important way of getting the right information, showing that policymakers use existing networks and systems of knowledge flows to access the information they need. This supports the finding that merging the agendas or finding development co-benefits will be heavily influenced by existing policy networks, including sectoral ones. For example, while some policy storylines showed little agreement, in Bangladesh coalitions had formed around two different policy areas – energy and environment – which has shaped their policy responses to climate change. These coalitions are not unique to climate planning: they also cut across other areas of Bangladesh's public sector.

Further work may be needed to support the development of new networks and knowledge pathways around cross-cutting climate change issues and between traditionally separate issues such as low carbon and resilience objectives. Key organisations act as knowledge hubs and connect others to pass on key information in a policy area. These are often the coordinating ministry and organisations that provide technical support or other forms of assistance. The hubs need to be sustainable sources of information over time, and to reach out to other organisations. In cases where the coordinating organisation is not a particularly strong hub, institutional responsibilities need to be re-assessed or further work needs to be done to embed that organisation in wider social networks around climate change and national policymaking in key sectors.

9

Conclusions

Each country has taken its own approach to considering climate change in national planning, but all three have sought to address mitigation and adaptation concerns through an overarching framework and have set up funding mechanisms to support the financing of these plans.

The institutional arrangements put in place have sought to establish cross-sectoral mechanisms, support political will and move towards implementation within line ministries. While each country identifies the need to find co-benefits within their overarching discourses, they are all seeking to achieve it in different ways. This includes: using one agenda as part of the prioritisation criteria for selecting measures in another area; including both agendas in overarching discourses but largely maintaining separation in implementation; and mainstreaming both agendas through line ministry priorities where possible.

The meaning of co-benefits is also different across contexts. In Bangladesh the co-benefit agenda is more implicit, but low-carbon activities sit under different policy areas such as renewable energy and energy efficiency. Ethiopia recognises the co-benefits between adaptation and mitigation as areas for synergy and is moving towards an articulation of co-benefits with development priorities. Rwanda has focused on development co-benefits with national priorities rather than co-benefits between the agendas.

There is a diversity of views on what LCRD means in practice and how co-benefits between mitigation and adaptation agendas might be found. While this is to be expected in a newly emerging policy area, what is of interest is how coalitions are forming around the different ideas and how these will support the move from planning to implementation. In all three countries, the views of stakeholder groups ranged from considering low-carbon and resilience objectives

as separate policy agendas, to viewing them as complementary. In each case, the views of stakeholders from different parts of government were spread across different policy storylines.

This diversity of views on what the agenda means in each context suggests that the agenda is still emerging and coalitions and consensus are still developing. Some variety will probably remain, but if key policy areas are to be implemented, there must be greater consensus on what approach will be taken in each sector or context. One way to develop this may be further debate across government to consolidate ideas and develop a national approach with wider national ownership.

There are many similarities across the countries studied here on how stakeholders are considering what it means to bring together LCRD, but each country also had specific national issues that have become associated with LCRD. These are important elements to consider when supporting or working with a low-carbon resilient agenda in different contexts. There is a wide range of incentives to addressing LCRD in national planning and widespread stakeholder consensus on those in each context. What is also striking is the strong consensus between the countries of the overwhelming incentives to access climate finance and support existing national priorities through the co-benefits of an LCRD approach.

The use of knowledge and the way it flows between actors is an important part of the planning process and one that has its own political economy. The fact that policymakers seek information from technical as well as informal sources and pre-existing networks has implications for the way in which the policy agenda is forming and how we might find synergies between agendas. The emphasis on technical data suggests a science-first approach. However, in the context of great policy uncertainty and the need for innovation and new approaches, a policy-first approach may be preferable.

Policymakers in Ethiopia and Bangladesh use existing networks and systems of knowledge flows to access the information they need. So it would follow that merging the agendas or finding development co-benefits will be heavily influenced by existing policy networks, and policy and planning decisions are likely to draw on existing approaches and analysis rather than take a new approach. Very few stakeholders coalesced around a belief in transformative change or leveraging greater outcomes by merging policy agendas. Instead they saw the issues as somewhere between complementary and co-beneficial.

Key organisations play a dual role in the planning process, as information hubs and connectors acting as a bridge between actors who do not normally have any linkages. These are both important functions, as informal exchange is one of the main ways that actors gather new information on the issue. These functions need to be sustained, and if international partners or consultants are currently filling these roles (either formally or informally), they must devise a strategy to pass them on to national institutions.

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Bangladesh, Ethiopia and Rwanda are at the forefront of developing national plans that address elements of both climate change mitigation and adaptation with a low carbon resilient development (LCRD) agenda. This working paper explores the experience of LCRD planning in each country using stakeholder interviews, analysis of policy documents and surveys to understand how this agenda is emerging in practice, and what ideas and discourses are shaping the policy development. Establishing a national consensus on what is understood by LCRD is shown to be important in building stakeholder support for any proposed LCRD agenda, as is clearly defining which co-benefits are being targeted.

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