



# RESEARCH BRIEF – APRIL 2015

## TRACKING CLIMATE AID IN AFRICA: THE CASE OF THE WORLD BANK

### EXECUTIVE SUMMARY

In 2014, the CCAPS research team reviewed, coded, and analyzed all World Bank projects implemented in Sub-Saharan Africa for five years (from 2008 to 2012 inclusive) in an effort to discern trends in climate change adaptation and financing in the region by one of the leading providers of development finance. Results confirmed a significant level of climate-oriented development financing, based on both the *amount* of World Bank committed funds and the *number* of its projects and activities. After summarizing several findings from this newly coded dataset, this brief discusses the policy relevance of tracking climate financing for the World Bank, recipient country governments, and development initiatives in order to improve climate adaptation strategies in Sub-Saharan Africa.

### AUTHORS

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Since the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties in Copenhagen in 2009, the international community has committed significant resources to climate change adaptation and mitigation in developing countries.<sup>1</sup> The primary channel for such resources is through traditional official development assistance, or ODA. As a result, over the past five years climate financing or “climate aid” has taken on a larger role within multilateral and bilateral development projects.

The need for such aid is supported by substantial research. A 2013 World Bank report, for example, finds the effects of climate change are likely to be inherently unequal and concentrated in the world’s poorest regions, which have the least capacity to cope and adapt.<sup>2</sup> Although many regions will be affected, Sub-Saharan Africa is particularly vulnerable to climate change due to its dependence on agriculture for food, income, and employment. As 97 percent of agriculture production in Sub-Saharan Africa is rainfed, changes in precipitation could have dire consequences for sustainable development and food security, especially in fragile states.<sup>3</sup> And with an average gross national income of less than \$1,600 across the region, Sub-Saharan Africa (with the exception of South Africa) remains highly dependent on aid and other forms of external financing for climate change investments.

In response to these growing vulnerabilities, development programs are focusing more on incorporating climate resilience into their projects. Yet simply rebranding current international development projects as climate-oriented is not enough. As Robert Zoellick, former

president of the World Bank, noted in 2007, “climate change policies cannot be the frosting on the cake of development; they must be baked into the recipe of growth and social development.”<sup>4</sup>

## CLIMATE FINANCING IN INTERNATIONAL DEVELOPMENT

Both states and organizations are starting to address climate change. Under the UNFCCC, developed countries pledged \$30 billion between 2010 and 2012 through the Fast-Start Finance (FSF) program and committed to donate an additional \$100 billion annually starting in 2020.<sup>5</sup> All climate finance is explicitly intended to be *new and additional* to existing levels of official development assistance, meaning that climate aid is not supposed to crowd out or be double counted with existing aid. Although donors exceeded expectations by providing \$35 billion during the Fast-Start Finance period, only five to seven billion dollars went toward helping developing countries for climate change *adaptation*. The majority of funds instead focused on mitigation measures, such as REDD+ and Climate Investment Fund programs to prevent deforestation, improve clean energy, and increase energy efficiency.<sup>6</sup> The primary recipients of these mitigation fast-start funds were middle-income countries, such as India and Brazil, which already had in place the capacity to apply for and manage complex, highly regulated international climate funds. This inadvertently left the least developed countries—those arguably most vulnerable to climate-related shocks and in most need of such financing—with few resources to launch robust adaptation programs.

Following the initial push through the fast-start funding mechanism, climate financing has plateaued since 2012 and developed countries’ commitment to increasing climate funding appears to be wavering.<sup>7</sup> However, at the same time, multilateral and aid agencies have widely adopted ambitious climate change strategies and attempted to mainstream climate

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change activities into their development programs.<sup>8</sup> In line with these goals, numerous multilateral development banks, led by the World Bank, initiated a coordinated effort in 2011 to develop a tracking and reporting system to account for the climate co-benefits of their development activities to accurately account for their climate change activities within their broader development portfolios.<sup>9</sup> The result is a seeming shift towards “greening” development aid that promises to fill critical gaps in adaptation financing. Yet few, if any, studies have independently analyzed adaptation spending by aid agencies to verify that this change is indeed underway.

## CLIMATE CHANGE AND DEVELOPMENT AT THE WORLD BANK

The World Bank is one of the largest providers of official development assistance in the world and a leader in setting development agendas through its capacity for generating development research and data.<sup>10</sup> The World Bank recognizes climate change as a fundamental threat to sustainable development and poverty alleviation and is aggressively integrating climate resilience into its development programs.<sup>11</sup> World Bank president Jim Yong Kim has said that “climate change poses one of the toughest challenges

facing us today” and that it has “the potential to put prosperity out of the reach of millions of people.”<sup>12</sup> As such, the World Bank’s leadership has identified climate resilience—sometimes known as ‘climate proofing’—as essential to the success of its development programs.<sup>13</sup>

Recognizing this, the World Bank Group on Climate Change works to coordinate the World Bank’s climate strategy. This strategy includes four key elements: (i) building low-carbon, climate-resilient cities, (ii) promoting climate-smart agriculture, (iii) accelerating energy efficiency and investment in renewable energy, and (iv) developing carbon pricing.<sup>14</sup> As an example of these efforts, the World Bank reported in 2013 that 13 percent of its International Development Association projects included benefits that addressed climate change. In the same year, the World Bank Group reported that it provided a total of \$6.5 billion in lending for projects that had mitigation benefits and \$2.9 billion for projects with adaptation benefits.<sup>15</sup> The World Bank has also recently implemented an internal climate change adaptation and mitigation monitoring system based on assigning adaptation or mitigation ‘co-benefits’ to funds for certain activities within its projects. However, early results of this coding are not publicly available.

Without effective data analysis and publication of results on its climate programs, the World Bank’s effort may remain largely invisible to those outside of the institution. Moreover, the lack of transparency on its climate finance activities and lack of access to the raw data from its internal reporting systems may fuel skepticism that the World Bank is “greenwashing” its development programs in the aggregate results that it does publish.<sup>16</sup>

This brief, based on the climate coding methodology independently developed by CCAPS, assesses these questions. The World Bank is the focus of this study not only because it is one of the largest aid donors in Africa, but also because its recent open data initiative has greatly facilitated access to the project

documents needed to apply the CCAPS climate coding methodology.<sup>17</sup> This study evaluates all World Bank development projects in Sub-Saharan Africa from 2008 to 2012 for their relevance to climate change adaptation and mitigation, with the goal of discerning how much World Bank aid is oriented towards climate change activities and is going to countries who most need that aid given their relative vulnerability to

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climate change. This exercise allows for the evaluation of the validity of the World Bank’s claims regarding its climate mainstreaming. As the analysis reveals below, this study finds that not only are the World Bank’s reported numbers on the climate co-benefits of its projects valid, there is robust evidence that indicates that the World Bank’s tracking methodology may actually be underreporting the climate relevance of its programs. To skeptics and advocates alike, this is good news and a sign that one of the most important aid donors in the world is indeed greening.

## STUDY METHODOLOGY

For this study, the CCAPS team coded 616 World Bank projects approved from 2008 to 2012 for Sub-Saharan Africa, using World Bank project documentation and applying the CCAPS climate and geo-coding methodology to analyze the financial and spatial aspects of climate aid. The CCAPS coding method uses a spectrum to code each project according to the specific activity components included in the project document commitments.<sup>20</sup> Researchers developed a climate coding handbook and reference manual to

### *The CCAPS Climate Adaptation Tracking Methodology*

In 2012, CCAPS piloted the climate aid tracking methodology in Malawi, where researchers climate coded aid projects from 27 leading development donors working in the country.<sup>18</sup> The Malawi dataset includes 754 projects from 1996–2011, which were coded according to the CCAPS Climate Adaptation Aid Methodology. With this data, CCAPS produced metrics, maps, and briefs on climate change adaptation in Malawi. Results showed that “a low percentage of aid explicitly targets climate adaptation, but there are a substantial number of adaptation-relevant activities underway in more general capacity-building development projects.”<sup>19</sup> After analyzing and mapping the Malawi data to assess climate aid distribution by sector, approval date, donor, and location, three key policy implications surfaced. This type of study can help policymakers with targeting and aid allocation, assessing effectiveness, and increasing transparency. In response to this conclusion and broad positive feedback from donors and policymakers, CCAPS scaled the climate coding and analysis to include all of Africa for one major donor—the World Bank.

guide uniform, accurately calibrated coding across a group of nine coders.

*This study finds the World Bank’s reported numbers on the climate co-benefits of its projects are not only valid, but potentially even underreporting the climate relevance of its programs. To skeptics and advocates alike, this is good news and a sign that one of the most important aid donors in the world is indeed greening.*

The coding process entails a coder labeling each activity within a project as climate-oriented development (CO), capacity development (CD), general development (GD), or ambiguous development (AD).<sup>21</sup> The coder then gives the project a similarly scaled score for its overall relevance to climate change adaptation. A weighted average of these scores is then calculated and a final project score is assigned to each project. These final project scores thus allow

researchers to analyze the allocation of climate aid within aggregate aid amounts.

The CCAPS team first developed and tested the methodology during a pilot project focused on Malawi and subsequently applied the methodology to a large set of World Bank projects throughout Sub-Saharan Africa. The resulting climate-coded and geo-coded dataset of World Bank projects provides a deeper understanding of climate aid and finance strategies by one large donor across the continent. This methodology is broadly similar to the tracking system used by the World Bank and other multilateral development banks, insofar as it examines each project activity according to its climate relevance and weights each activity to calculate a holistic project-level score on a climate spectrum.

Projects were double-coded and arbitrated by a third researcher to ensure accuracy and objectivity. The CCAPS team obtained a list of 780 projects in Sub-Saharan Africa, covering all sectors, from the World Bank website (see countries included in Figure 1). Of these 780 projects, 164 projects were discarded due to lack of sufficient project documentation available for coding. The mean project commitment of the 616 remaining projects

included in this study was \$60.5 million, and the median was \$25 million, with the smallest project commitment at \$50,000 and the largest at \$3.75 billion. Overall, the projects coded represent \$37.2 billion of commitments by the World Bank over five years, with an average of 123 projects approved per year.

## OVERVIEW OF RESULTS

### Overall Climate Relevance

The CCAPS dataset includes World Bank financed development projects analyzed by activity, project, and committed funds. The information reveals where the World Bank is focusing climate-adaptation efforts, what type of activities constitute climate-relevant aid, and how much money is intended for these development projects. On average, each coded project was made up of between four and five activities. Figure 2 shows a modest level of

funding for climate-oriented projects at eight percent of the total dataset, or 52 projects. Indeed, in terms of both number of activities and project commitment amounts, the results are consistent, showing six to eight percent of funding and activities earning a ‘climate oriented’ final score. Furthermore, approximately 20 to 24 percent of funding was deemed relevant for capacity development with respect to climate change. These results indicate the World Bank’s overall commitment to climate change funding. The results of this study comprising all of Sub-Saharan Africa are higher than previous results showing donors allocating one to six percent of their portfolios to ‘climate oriented’ aid in the Malawi study of the activities of 27 donors.<sup>24</sup>

### Sector and Theme Analysis

The World Bank assigns all projects both sector and theme classifications, and each project can have one

Figure 1: Regions Included in This Study

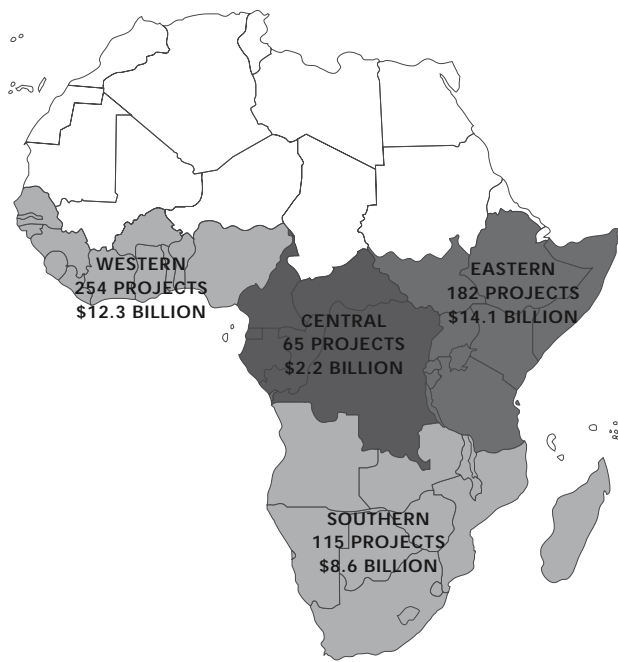
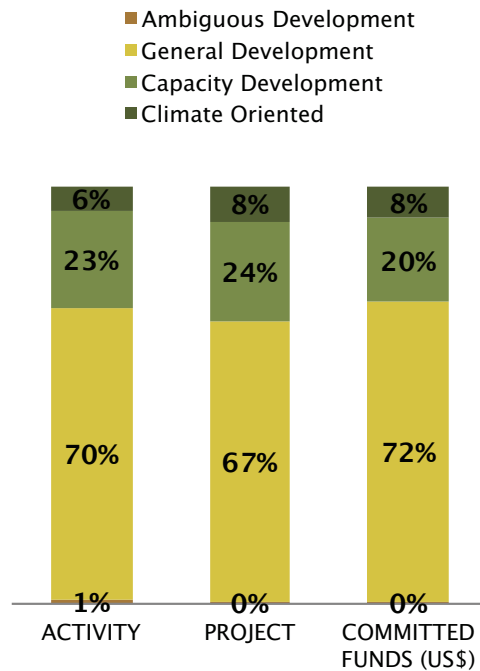


Figure 2: Project Scores by Level of Analysis



Source: Justin Baker, Krista Rasmussen, and Catherine Weaver, Climate Coded and Geocoded Activity-Level Data from the World Bank’s Sub-Saharan Africa Projects (Austin: AidData and the Robert S. Strauss Center for International Security and Law, 2014).

or more designations in each of these categories. Each sector or theme designation is also assigned a percentage based on how much of a project it makes up. An example of this information for a particular project, taken from the World Bank Projects and Operations website, is shown in Figure 3.<sup>25</sup>

When analyzed by theme, the World Bank marked just two percent of the project funding included in the CCAPS dataset as addressing climate change. Interestingly, however, according to the CCAPS climate spectrum, the World Bank allocates 32 percent to capacity development or climate-oriented projects when these activities were coded from the rich descriptions provided in full project documents. As shown in

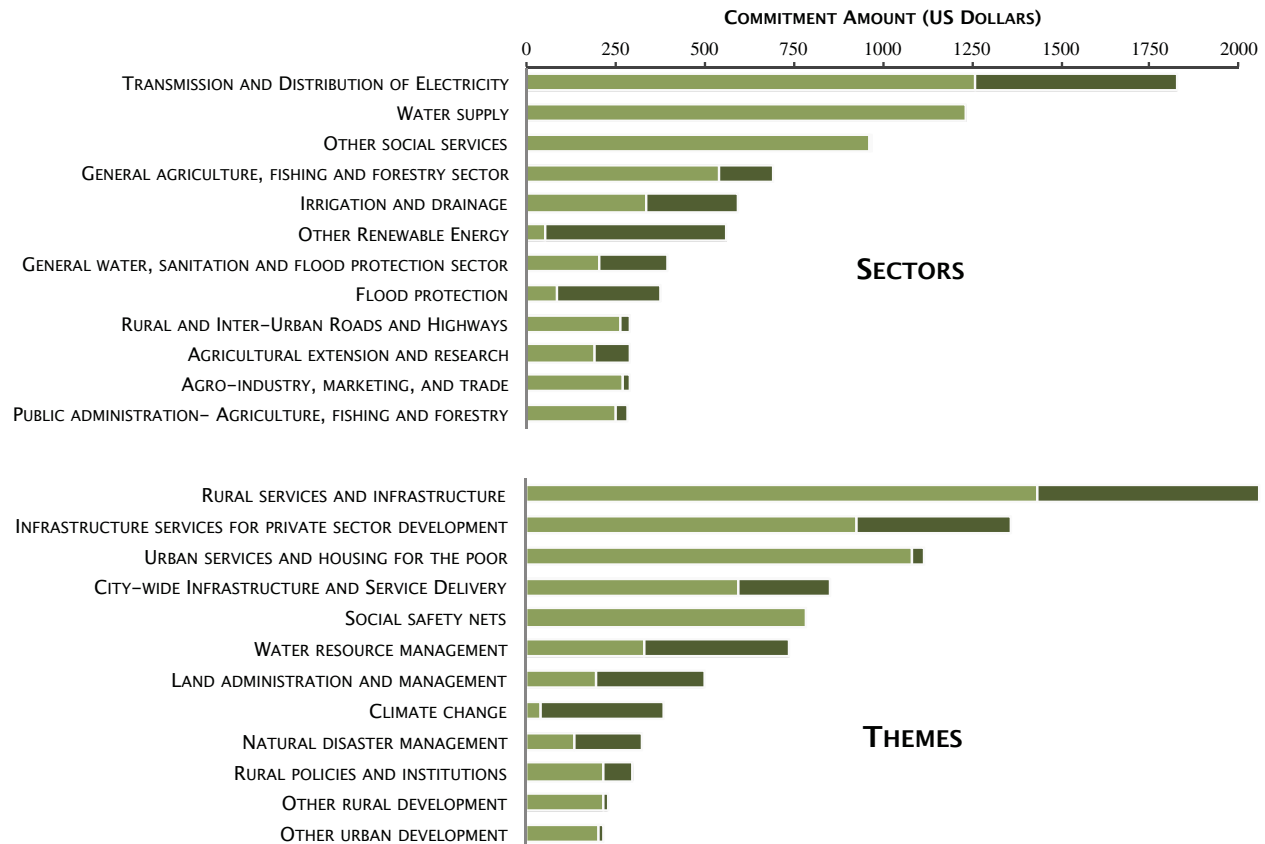
Figure 4, the top theme among project activities in the dataset was *rural services and infrastructure*, followed by *infrastructure services for private sector development*, when examining all capacity development and climate-oriented projects in the dataset. The *infrastructure services for private sector development* is largely comprised of support to private companies working to develop alternative or renewable energy sources to power their country or region. Examples include solar or wind farms and transformers, advanced water irrigation and treatment, and reducing dependence on (or decommissioning) coal-burning power plants.

The World Bank internally marked 33 of the 616 coded projects (approximately five percent) as including at

Figure 3: Project Information Available on World Bank Projects and Operations Website

OVERVIEW	DETAILS	FINANCIALS	PROCUREMENT	RATINGS	RESULTS	MAP	DOCUMENTS	NEWS & MEDIA
<b>Basic Information</b>								
Project ID	P096323							
Status	Active							
Approval Date	May 29, 2008							
Closing Date	July 30, 2015							
Country	Ethiopia							
Region	Africa							
Environmental Category	B							
<b>Sectors</b>								
General water, sanitation and flood protection sector	40%							
General agriculture, fishing and forestry sector	30%							
General public administration sector	15%							
General transportation sector	10%							
Water supply	5%							
<b>Team Leader</b>								
Catherine Signe Tovey								
<b>Borrower***</b>								
MOFED, GOVERNMENT OF ETHIOPIA								
<b>Implementing Agency</b>								
MINISTRY OF WATER RESOURCES								
<b>Total Project Cost**</b>								
US\$ 70.00 million								
<b>Commitment Amount</b>								
US\$ 45.00 million								
<b>Themes</b>								
Water resource management	50%							
Rural services and infrastructure	25%							
Participation and civic engagement	25%							

Figure 4: Top Sectors and Themes for Climate-Oriented and Capacity Development Project Activities



least a partial climate change theme. Of these, 31 were also coded as either capacity development or climate oriented by CCAPS, confirming the World Bank designation in the great majority of these projects.

In general, however, the World Bank appears to have *underreported* aid activities relevant to climate change adaptation. Of all funding commitments in the coded dataset, the organization allocated only approximately two percent to the climate change theme, compared to a minimum of six percent according to the CCAPS coding methodology. In fact, 30 projects coded as climate oriented and 140 coded as capacity development by CCAPS were not assigned a climate change theme at all by the World Bank. Indeed, a project currently active in Senegal titled *Stormwater Management and Climate Change Adaptation* did not include a climate change

theme assignment; this was also the case with the *Cities and Climate Change* project in Mozambique. Other projects not flagged with the climate change theme by the World Bank were less obviously climate-relevant, but still arguably target enhanced adaptive capacity in the context of climate change. For example, the *Ethiopia Disaster Risk Management Country Plan Project, Phase I* was not assigned a climate change theme, but includes early-warning, disaster risk reduction, and contingency planning activities all set within the context of climate change in Ethiopia.<sup>26</sup> This result indicates that the World Bank's internal tracking and reporting system may be based on a very conservative coding method that only takes into account the most explicit climate change adaptation and mitigation activities, rather than a broader set of development activities that may not

directly address climate change but clearly have direct or indirect benefits for societies' adaptation.

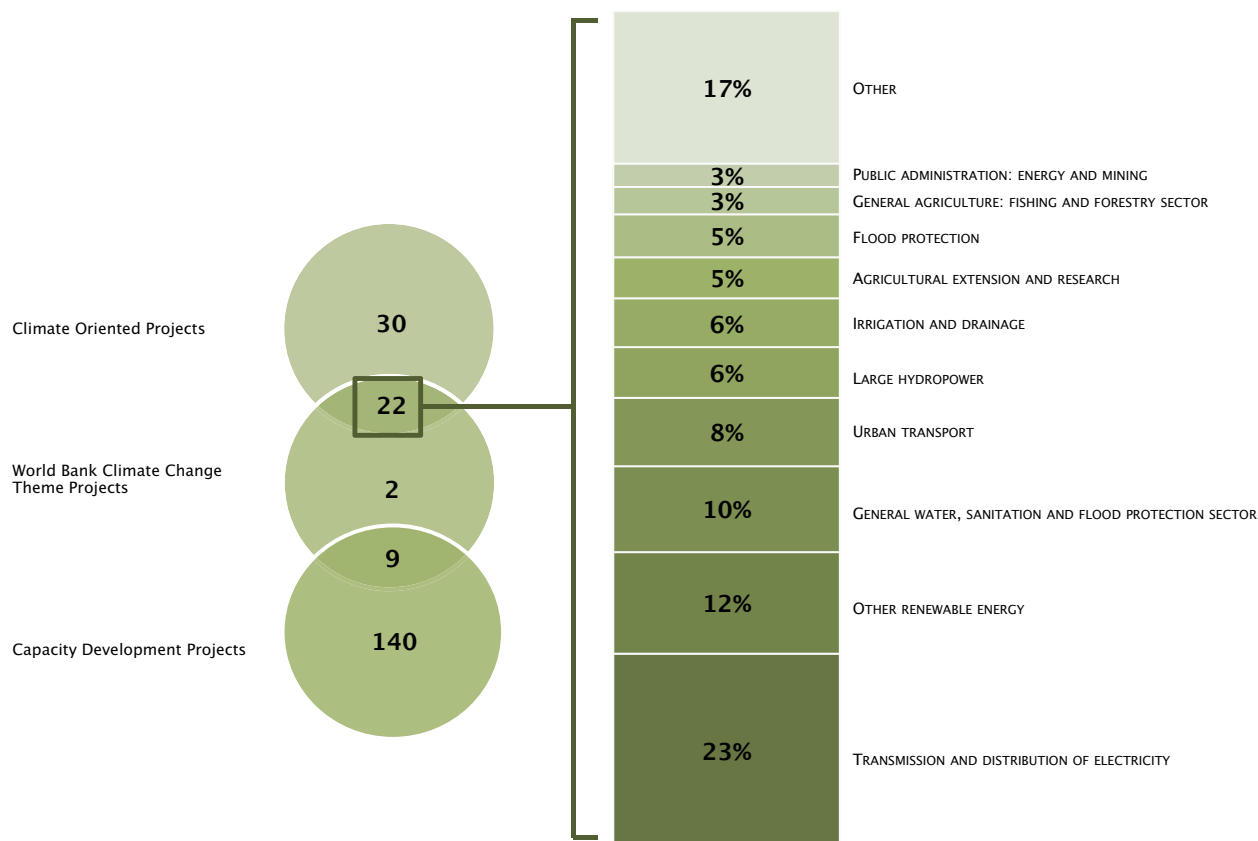
To this point, Figure 5 shows the sector distribution of these non-overlapping projects. While no sector dominates this distribution, it is interesting to note that several of the top ten sectors are general categories (such as public administration, general water, and general agriculture). This finding suggests that the World Bank, in general, has differentiated between capacity building or administration projects and projects that directly relate to climate change adaptation, such as infrastructure or training. While the World Bank has yet to release its own internal figures on climate adaptation 'co-benefits,' this study suggests that, at least compared to its climate

change theme assignment, the World Bank may have a significantly greater portion of its funding contributing towards climate change adaptation in Sub-Saharan Africa than it reports.

### *Regional Analysis: Skewed Climate Finance*

A closer look at the data, however, presents a varied picture of World Bank lending across Sub-Saharan Africa. A region-by-region analysis of the dataset shows that Southern Africa received a slightly higher amount of climate-oriented aid at 11 percent. When taking capacity development aid into account, compared to other regions in Sub-Saharan Africa, Central Africa has the highest proportion of its aid going toward climate aid: 37 percent of all funding to Central Africa went

*Figure 5: Sector Distribution of Climate-Oriented Projects Not Given Climate Change Theme by World Bank Activities*





*Table 1: Descriptive Statistics by Region*

Region	Number of Projects	Number of Activities	Cumulative Commitment	Number of CD projects	Number of CO Projects	CO funding across regions	CD funding across regions	Average CCAPS Score
Central	65	360	2,203	16	4	5%	5%	0.69
Eastern	182	965	14,115	41	18	31%	38%	0.75
Southern	115	616	8,634	30	17	33%	23%	0.82
Western	254	1208	12,315	62	13	31%	34%	0.69
<b>Total</b>	<b>616</b>	<b>3149</b>	<b>37,267</b>	<b>149</b>	<b>52</b>	<b>100%</b>	<b>100%</b>	<b>0.73</b>

Source: Justin Baker, Krista Rasmussen, and Catherine Weaver, Climate Coded and Geocoded Activity-Level Data from the World Bank's Sub-Saharan Africa Projects (Austin: AidData and the Robert S. Strauss Center for International Security and Law, 2014).

Notes: CD = Capacity Development, CO = Climate-Oriented Development.

to climate-oriented or capacity development projects (see Figure 6). However, compared to other regions studied, Central Africa also received the lowest number of projects and lowest level of aid of any region, with only five percent each of both climate-oriented and capacity development funding allocated to the region (see Table 1). Furthermore, projects in Southern and Eastern Africa received, on average, higher climate scores than Western and Central Africa, meaning that individual projects in the former two regions generally included a greater focus on climate change.

The top recipients of World Bank climate finance for the region are shown in Figure 6. There is an overlap of five countries between the top World Bank climate change theme countries and the top recipients of CO and CD aid as measured by CCAPS. Specifically, these are Nigeria, Ethiopia, Uganda, the Democratic Republic of the Congo, and Mozambique. South Africa is the highest recipient of aid designated with the World Bank's climate change theme, yet it is also the country in Africa with the highest GNI and capacity to garner climate finance outside of development aid flows. These results suggest that while World Bank

*While World Bank climate aid overall is higher than official organizational statistics would suggest, finance is not evenly distributed across the continent nor is it clearly being allocated to areas within Sub-Saharan Africa that are in most need of climate aid.*

climate aid overall is higher than official organizational statistics would suggest, finance is not evenly distributed across the continent nor is it clearly being allocated to areas within Sub-Saharan Africa that are in most need of climate aid. A forthcoming CCAPS brief will more closely examine the geographical distribution of this adaptation and mitigation aid, taking into account different measures of climate change vulnerability.

## POLICY RELEVANCE

The CCAPS independent coding and analysis of World Bank projects in Sub-Saharan Africa offers

new insights into climate finance that are important for at least three stakeholder audiences.

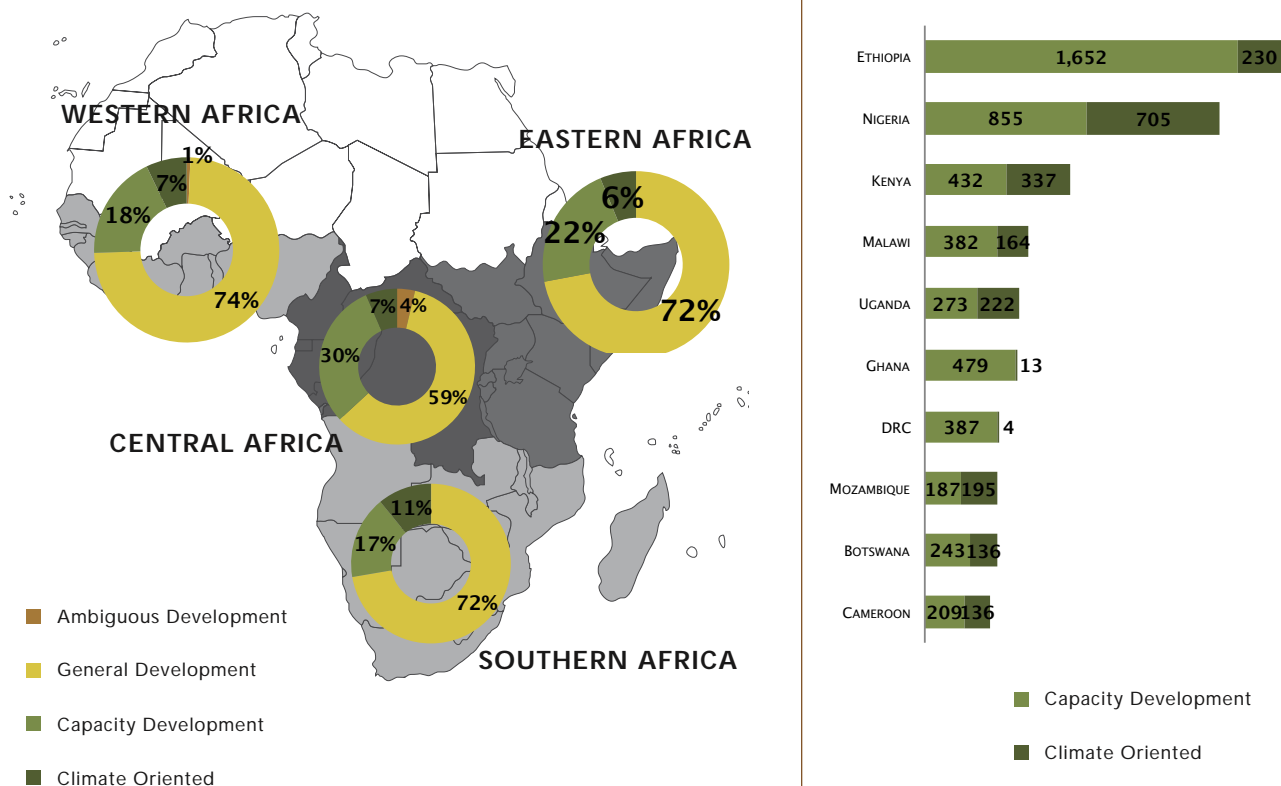
**The World Bank:** The CCAPS analysis provides an alternative, comprehensive picture of the World Bank’s adaptation activities, as evaluated by an independent third party. The results of this study verify an overall positive trend in World Bank climate lending and add to a growing body of evidence on climate change mainstreaming at the Bank.

**Other donors:** The CCAPS analysis of World Bank climate aid could help to increase awareness of, and inform the internal application of, the new World Bank and MDB climate aid tracking system. The work in turn could help to increase transparency of climate finance tracking initiatives at the agency level. The dataset is intended for use in assessing the allocation and evaluation

of climate financing. Forthcoming CCAPS briefs offering differentiated analyses will demonstrate what can be done with such fine-grained climate and geocoded data.

**Recipient countries and watchdog organizations:** The CCAPS data and analysis allows developing country partners to see where the climate aid is in their country, discerning where such aid is meeting needs as identified by National Adaptation Programs of Action (NAPAs) and Nationally Appropriate Mitigation Action (NAMAs). Likewise, such data, particularly when broken down spatially and into project component parts, can enable country governments and climate finance watchdog organizations to keep aid agencies—and more importantly, their donor governments—accountable for international pledges for new and additional financing. 🇳🇮

Figure 6: Aid Allocation by Region (left) and Top Ten Recipients of Climate Aid (right)



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