



# RESEARCH BRIEF – SEPTEMBER 2012

## TRACKING CLIMATE ADAPTATION AID: METHODOLOGY

### EXECUTIVE SUMMARY

Empirically determining how much climate change work is being integrated, or “mainstreamed,” into traditional development assistance programs requires a robust methodology for identifying and measuring how much of development aid contributes to adaptation and can be thus called “climate aid.” This brief presents CCAPS methodology to track activities relevant to climate change adaptation within official development assistance (ODA) projects in Malawi. This proof of concept shows that it is indeed not only desirable, but possible, to provide accessible and timely data on climate aid to facilitate donor coordination, country adaptation planning and budget management, and stakeholder feedback and accountability.

### AUTHORS

**Catherine Weaver** is an associate professor at the LBJ School of Public Affairs and distinguished scholar and research coordinator at the Robert S. Strauss Center for International Security and Law at the University of Texas at Austin.

**Justin Baker** is a research assistant at the Robert S. Strauss Center for International Security and Law.

**Christian Peratsakis** is a technical associate at Development Gateway and former research assistant at the Robert S. Strauss Center for International Security and Law.

### WHY TRACK CLIMATE AID?

In the world today, developing countries receive nearly \$150 billion annually in general development assistance to promote socioeconomic development and poverty alleviation. According to the World Bank’s 2010 *World Development Report*, however, \$100 billion a year will be needed *on top of* current development aid flows to help individuals and communities in the developing world address the threats of global climate change.<sup>1</sup> At the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP) in Copenhagen in late 2009, advanced industrialized countries pledged to provide \$30 billion in “new and additional” funding to fast start financing for adaptation between 2010-2012. Several dedicated funds, such as the Adaptation Fund and the newly proposed Green Climate Fund, have been or are currently being established to provide financing to developing countries to facilitate climate change mitigation and adaptation work.<sup>2</sup> In sum, there is widespread consensus in the international community that this climate finance is critical for poor countries. This is particularly true for countries in Africa, which the International Panel on Climate Change has identified as the continent most vulnerable to the detrimental effects of climate change.<sup>3</sup>

Political will aside, a core challenge today lies in discerning how much climate change work is being integrated, or “mainstreamed,” into traditional development assistance programs. In 2006, the member states of the Organization for Economic Co-operation and Development (OECD) pledged to integrate climate change adaptation into development cooperation. They invited the OECD Development Assistance Committee (DAC) to “develop methodologies to monitor progress on integration of climate change risks and adaptation in development activities and on strengthening the adaptive capacities of developing country partners.”<sup>4</sup> This is a daunting task: empirically determining such mainstreamed

*This proof of concept shows it is not only desirable, but possible, to provide accessible and timely data on climate aid to facilitate donor coordination, adaptation planning, and accountability.*

climate aid requires a robust methodology for identifying and measuring how much of development aid contributes to adaptation and can be thus called “climate aid.”

To this end, this brief presents the methodology developed and tested by the Climate Change and African Political Stability (CCAPS) program to track and map activities relevant to climate change adaptation within official development assistance (ODA) projects in Malawi. CCAPS developed the climate coding methodology from September 2011 to May 2012 and tested the methodology using active project documents collected from all ODA donors for all sectors of aid in Malawi.<sup>5,6</sup> Building on previous collaborative work with AidData and Development Gateway, CCAPS simultaneously geomapped aid activities to generate spatially visualized data on donor-funded climate adaptation work throughout the country. The end result is a proof of concept that it is indeed not only desirable, but possible, to provide accessible and timely data on climate aid to facilitate donor coordination, country adaptation planning and budget management, and stakeholder feedback and accountability.

The CCAPS climate coding methodology is driven by the desire to balance rigor with pragmatism, using the most detailed project-level information available and employing a climate coding spectrum that captures the diversity of climate relevant activities within projects. CCAPS seeks to generate activity-level information to provide a rich level of detail on where climate aid has been mobilized and also to enable comparison to the OECD’s Adaptation Marker system. In this process, CCAPS hopes to empower broader analysis on the validity of prevailing international reporting practices and key

insights into the best and worst practices of donor financing and reporting behavior in climate aid.<sup>7</sup>

## CCAPS CLIMATE CODING METHODOLOGY

The CCAPS method relies upon a robust coding exercise that draws from actual donor project documents collected via Malawi’s Aid Management Platform (AMP) and through direct contact with aid donors in country.<sup>8</sup> The coder reads each project document in full and identifies all activities within the project.<sup>9</sup> Each activity is then geocoded and climate coded simultaneously by two research assistants, with discrepancies reconciled by a senior coder (arbitrator). Thus, each project is fully vetted by three highly trained coders, with an inter-coder reliability rate of over 84 percent. The process is illustrated in Figure 1.

The CCAPS methodology codes for climate relevance of aid activities using a continuous *spectrum*. The spectrum includes four poles, ranging from *Ambiguous Development* (which provides the least benefit to adaptation, including maladaptation) to *Climate-Oriented Development* (which is explicitly designed to address climate issues). In between these are two categories: *Capacity Development* reflects activities that enhance resilience to climate change but are not explicitly carried out with that purpose in mind, and *General Development* reflects activities that enhance human and environmental well-being but are not explicitly driven by or obviously directly relevant to address climate change threats. For analytical purposes, CCAPS assigned values of 0 to 2 along the spectrum, although these values can be changed to allow end users to assign weights according to their own value judgments.<sup>10</sup>

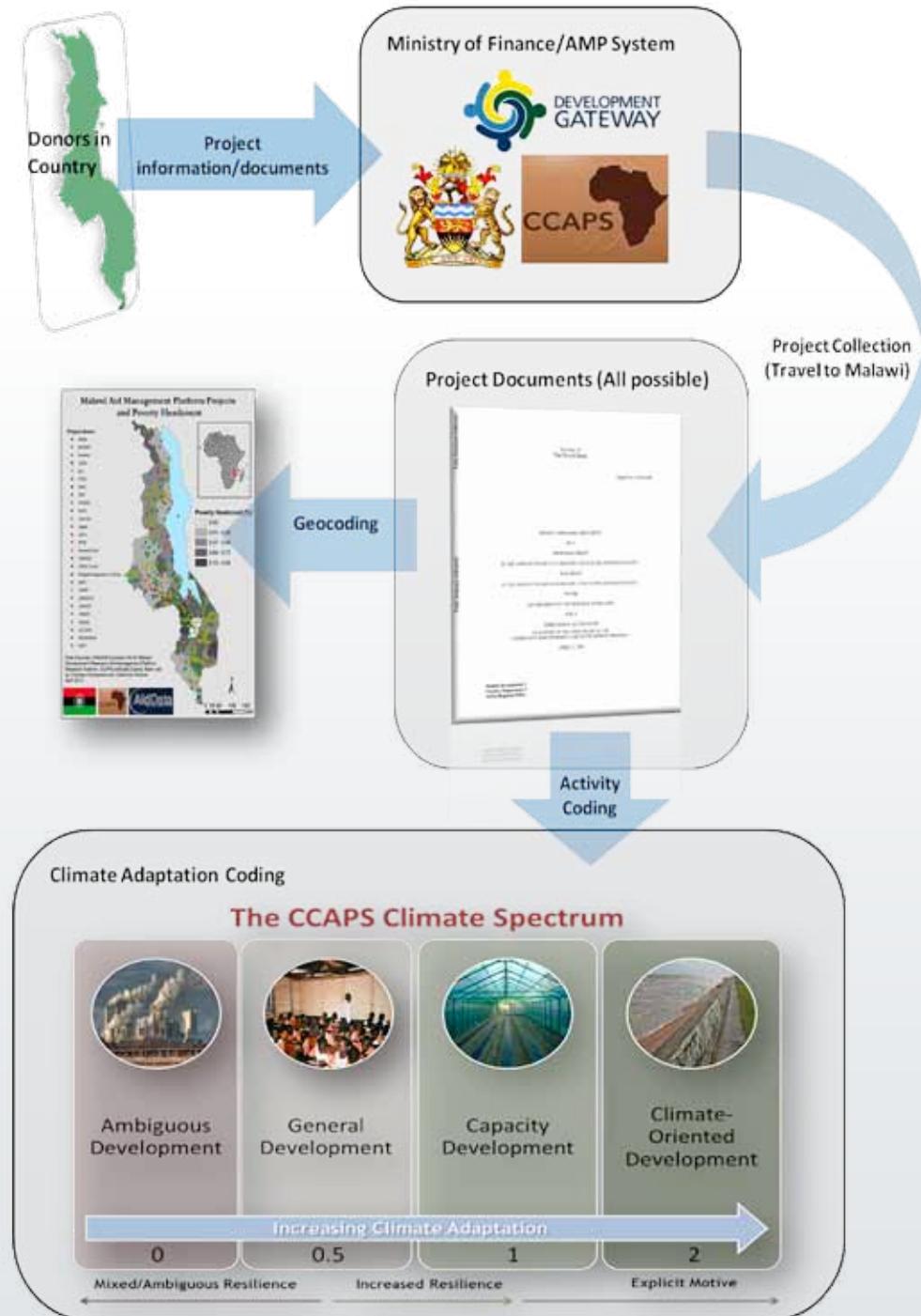
The insistence on activity-level, as opposed to project-level coding, is critical in order to achieve a much richer level of detail. Activity-level coding allows for the calculation of a whole project score that can be any value

between 0 and 2. For example, a project may receive a total score of 0.734, which falls between general development and capacity development. Importantly, it is necessary for coders to interpret an overall project score. This is done for the analytical purpose of comparing activity-level coding to project-level coding, in order to gauge the internal

validity of the method and to assess whether the more labor-intensive activity coding yields different and more accurate results than project-level coding.<sup>11</sup>

The CCAPS method for assessing the climate relevance of development aid is thus different from extant methods, which rely upon short project descriptions (as opposed

Figure 1. The CCAPS Climate Coding Process



to full project documents) and code only at the project level. Emphasis on activity-level coding is especially critical to CCAPS' endeavor. While technically simpler, project-level coding can create the illusion that a development project has only one thrust. In reality, of course, most projects have multiple objectives, some of which may be very different from the others, and therefore have very different climate adaptation impacts.

The spectrum scoring (0-2 values) thus intentionally builds upon – and is intended to be a corrective – to the efforts of the international community to track climate finance via the Rio and Adaptation Markers, developed and implemented by the OECD Development Assistance Committee.<sup>12</sup> Importantly, the Rio and Adaptation Markers are provided at the project level, meaning that the reported numbers can often obscure information on the amount and nature of distinct activities within aid programs as well as distort estimates of the overall amount of development financing dedicated to mitigation or adaptation work.

## CCAPS CODING METHOD: STEP-BY-STEP GUIDE

### Step 1: Activity Coding

Development projects in the past have been characterized as a whole, without regard to the different activities that can be enveloped by a single project title. The CCAPS approach breaks down each project into its component activities. For example, an agriculture project might have soil conservation as its main objective, but could include local capacity building, farmer education, and water conservation as activities within the project.

The implementation of this method begins with project-level documents – the best available information on a project's intended activities. Using these documents, each project is broken into its component activities, done by reading through the

documents and assigning activity codes manually. To achieve this level of detail, the methodology employs the AidData platform, which has already developed and implemented a methodology for coding development projects to the activity level (consisting of more than 700 codes).<sup>13</sup>

### Step 2: Pre-assigned Scores

After activity coding, each of these codes is automatically placed under one of the climate spectrum poles, according to a pre-assigned list of activities. The key to this method is that every possible activity code is *pre-assigned* a score on the climate spectrum. An important aspect of this methodology is the flexibility in these pre-assignments, which can be adjusted before coding begins to reflect local adaptation priorities and expert knowledge.

### Step 3: Manual Coding

After each activity has been scored automatically, a coder manually verifies the applicability of each pre-assigned code within the context of the project, using the available documents. Based upon evidence and context provided by the project documents, coders can adjust a pre-assigned score higher or lower on the spectrum (see Figure 2). For example, if the activity code for 'Internet' is pre-assigned as *General Development*, yet in a certain project the internet is being used in drought early-warning activities, the coder can change the score to *Climate-Oriented*. Coders also assign an overall climate score to each project, based on the overall goal of the project. Finally, a project goes through a double-blind coding process ending in arbitration of any differences in coder scoring.

Activities, as well as the project's focus as a whole, contribute to a final score, which precisely identifies a project's location on the climate spectrum. This detailed look allows the quantification and climate coding of both explicitly climate-relevant projects, as well as those that have adaptation components but are not primarily climate-focused.

Figure 2. CCAPS Climate Spectrum Definitions

**Climate-Oriented Development**

- An activity that intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by **targeting enhanced adaptive capacity** of these systems to actual or anticipated effects of climate change or responding to negative climate effects.
- *It must be clear that the motive or intent of the activity is framed by a changing climate, whether past, present, or future.*

**Capacity Development**

- An activity that reduces the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by **increasing the resilience** of these systems to actual or anticipated effects of climate change.
- *The activity does not have a climate-oriented motive, yet does provide climate resilience. This resilience separates ‘Capacity Development’ from ‘General Development.’*

**General Development**

- An activity that reduces the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by **increasing the general well-being** of these systems.
- *The activity will impact livelihoods by providing income, education, healthcare, and other measures of well-being, but will not increase climate change resilience. This is the widest ‘net’ of climate aid.*

**Ambiguous Development**

- An activity that has an **indeterminate effect** on the vulnerability of human or natural systems to the impacts of climate change and climate-related risks.
- *The activity may have a positive development outcome in the short-term, but its broader climate adaptation or mitigation effects are either negative or unclear.*

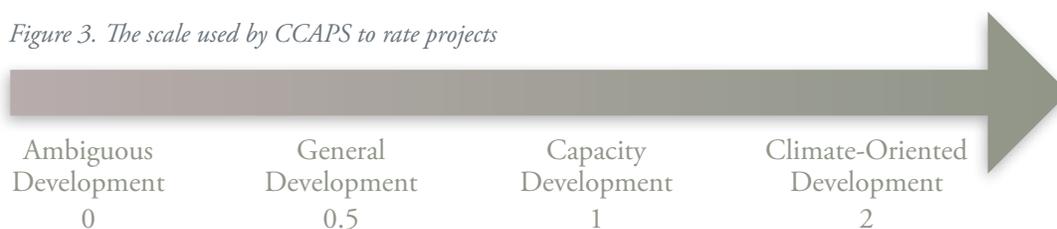
**Step 4: Weighting Projects**

After manual coding, each project will have multiple climate scores: one for each of its activities and one overall project score. These scores are then used to calculate a final climate score using a simple weighted average, although results can be broken down and analyzed in multiple ways. The CCAPS methodology proposes a 70 percent weight for the overall project scores, leaving

a 30 percent weight for the average activity code score of the project. This emphasis on the overall score for a project is due to the fact that the overall score is most likely to represent the true objective of a project, whereas individual activity scores may show greater variation in climate scores.

A weighting mechanism is needed to be able to compare scores across projects, donors, and time. Building upon the Rio Markers

Figure 3. The scale used by CCAPS to rate projects



(which uses a 0, 1, or 2 scale), CCAPS chose a similar scale to rate projects (see Figure 3). Placing projects back on the spectrum by final score allows clear comparison to other coded projects.

Along the spectrum, CCAPS assigns each pole a score from 0 to 2 with equal distances between the categories except for *Capacity Development* and *Climate-Oriented Development*, which is a larger gap because of the explicit aims of climate-oriented development.

CCAPS used a 0-2 scale to allow comparability with the OECD Adaptation Markers. There is one important caveat: despite the 0 and 2 values coinciding with the Adaptation Marker scores, an exact correspondence should not be made, as this spectrum is conceptually different than the Rio categories. Thus, a score of 1 on the Rio markers, which signifies that a project has a significant component for climate change adaptation, will not necessarily directly relate to a score of 1 on this spectrum. Assigning a 0 value for ambiguous development is valid given that it is not clear whether the activity or project will enhance adaptive capacity or not. *General Development* receives a score of 0.5; this is meant to capture those activities and projects that are overlooked by the Rio markers because they do not directly relate to climate change adaptation.

The final score for each project (FS) will be determined by a weighted average of the overall project score (OS) and the activity score average ( $\sum AS / nActivities$ ) as in the equation below:

$$FS = 0.7*OS + 0.3*[\sum AS / nActivities]$$

This simple weighting mechanism was chosen for several reasons. Given the lack of available activity-level financial data, this method must assume that each activity has the same scope and extent within the overall project. To overcome this assumption, coders choose an overall project score that serves as a way of recognizing where the main activities within the project fall on the climate spectrum. Therefore, a 70 percent weight is given to the overall project score and only 30 percent to the corresponding activity scores. It should be noted, however, that the weighting mechanism is flexible in that the relative weight of either the Overall Score or Activity Score can be adjusted according to the preference of a user.

## THE IMPORT OF DEFINING CLIMATE AID

Overall, the CCAPS methodology allows detailed information about the aims and scope of projects, which gives a more accurate and complete picture of the climate relevance and aid activities (see Figure 4). More importantly, the transparent methodology allows end-users to replicate and adjust the method according to their own interpretations of what constitutes adaptation aid and what values they feel certain activities should receive to reflect the explicit versus implicit intent and expected impact of aid activities. In turn, the spatial visualization of climate aid, provided through the simultaneous geomapping exercise, empowers analyses of aid allocation and future efforts to collect needed information for monitoring and evaluation purposes. 🇵🇷

Figure 4. Advantages of the CCAPS Method

**The CCAPS methodology builds upon the Rio Adaptation markers in several ways:**

1. ***New conceptualization of climate aid.*** Defining climate aid on a continuous spectrum provides added detail and accuracy.
2. ***Accepted definitions.*** This methodology builds upon accepted definitions of climate adaptation, adaptive capacity, and resilience to define the spectrum.
3. ***Third-party comparison and project evaluation.*** Because this scheme is independent of any individual donor, it follows that aid coded across different donors, or even types of donors, can be directly comparable.
4. ***Flexibility in pre-assigning codes.*** This method offers the ability to enlist the knowledge of climate experts in pre-assigning activity climate adaptation scores, according to local context.
5. ***In-country use.*** This method can be implemented at the recipient country level, and it is not reliant on donor reporting to a central database.

## ENDNOTES

<sup>1</sup> World Bank, *World Development Report 2010: Development and Climate Change* (Washington: World Bank, 2009).

<sup>2</sup> Nakhoda, Smita, Alica Caravani, Neil Bird, and Liane Schalatek, "Adaptation Finance," *Climate Finance Fundamentals*, Brief No.3 (London: Heinrich Böll Stiftung and Overseas Development Institute, 2011).

<sup>3</sup> Boko, M., I. Niang, A. Nyong, C. Vogel, A. Githeko, M. Medany, B. Osman-Elasha, R. Tabo and P. Yanda, "Africa" in *Climate Change 2007: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (eds) (Cambridge: Cambridge University Press, 2007).

<sup>4</sup> OECD, *Declaration on Integrating Climate Change Adaptation into Development Co-operation*. Adopted by

Development and Environment Ministers of OECD Member Countries on 4 April 2006 (Paris: OECD, 2006).

<sup>5</sup> The authors would like to acknowledge the significant contributions of Dylan Malcomb and Milad Pournik in crafting the coding methodology, and thank Sarah McDuff, Abigail Ofstedahl, Elena Rodriguez, Hanna Murphy-Pack, Florence Pichon, and Bryan Stephens for their coding assistance.

<sup>6</sup> For more information on the aid mapping work in Malawi, see Catherine Weaver and Christian Peratsakis, "Can Better Tracking of Adaptation Aid Reduce Climate Change Vulnerabilities on the Ground?" CCAPS Research Brief No. 2 (Austin: Strauss Center for International Security and Law, 2011).

<sup>7</sup> Further discussion of extant reporting methods and a comparison of CCAPS results to the OECD Adaptation Markers are provided in Baker, Peratsakis, and Weaver, "Tracking Climate Adaptation Aid: Insights on International Donor Reporting Practices," CCAPS Research Brief (forthcoming 2012). See also Maya Forstater with Rachel Rank, *Towards Climate Finance Transparency* (Publish What You Fund and AidInfo, May 2012); and Katharina and Axel Michaelowa, "Development Cooperation and Climate Change: Political-Economic Determinants of Adaptation Aid," CIS Working Paper No.69 (Zurich: ETH, 2011).

<sup>8</sup> Weaver and Peratsakis, 2011. Created by Development Gateway, the Aid Management Platform is an online application designed to assist governments in managing their aid portfolios. See [www.developmentgateway.org/programs/aid-management-program](http://www.developmentgateway.org/programs/aid-management-program).

<sup>9</sup> AidData, a CCAPS partner organization, carried out activity coding for all Malawi projects.

<sup>10</sup> The raw data from this pilot study are available at <http://strausscenter.org/aid.html>.

<sup>11</sup> This exercise was conducted so that CCAPS could systematically compare activity- versus project-level coding. If the results were roughly the same, it would indicate that the project-level coding (which is less time-intensive) is just as reliable as activity-level coding. However, as predicted, the results did vary, thus indicating that activity-level coding is necessary. These results are discussed in detail in Baker, Peratsakis, and Weaver, "Tracking Climate Aid in Africa: The Case of Malawi," CCAPS Research Brief (forthcoming).

<sup>12</sup> The Rio Marker system, established in 1998, requires aid donors to report on the relevance of aid projects for climate change mitigation (with a score of 2 indicating the project principle objective is mitigation, 1 equaling significant objective, and 0 signaling no objective). The Adaptation Marker, created in 2009 and first reported by select donors in 2010, similarly reports on a 0-2 scale.

<sup>13</sup> AidData's methodology is available at [www.aiddata.org/content/index/user-guide/coding-scheme](http://www.aiddata.org/content/index/user-guide/coding-scheme).

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THE UNIVERSITY OF TEXAS AT AUSTIN  
2315 RED RIVER STREET, AUSTIN, TEXAS 78712  
PHONE: 512-471-6267 | FAX: 512-471-6961  
CCAPS@STRAUSSCENTER.ORG  
WWW.STRAUSSCENTER.ORG/CCAPS

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