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CCAPS

CLIMATE CHANGE
AND AFRICAN
POLITICAL STABILITY

Tracking Climate Adaptation Aid

CCAPS Climate Codebook

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Contents

Background: 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.[1] 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" 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.[2] 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.[3]

Political will aside, the real 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."[4] This is a daunting task: empirically determining such mainstreamed climate aid requires a robust methodology for identifying and measuring how much of development assistance financing 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 at the University of Texas at Austin to track and map the climate change relevant activities within official development assistance (ODA) projects

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[1] World Bank. 2010. *World Development Report 2010: Development and Climate Change*. Washington, DC: World Bank.

[2] Nakhooda, Smita, Alica Caravani, Neil Bird and Liane Schalatek. 2011. "Adaptation Finance." *Climate Finance Fundamentals,* Brief No.3, November 2011. Heinrich Böll Stiftung and Overseas Development Institute. Available at www.climatefundsupdate.org.

[3] Boko, M., I. Niang, A. Nyong, C. Vogel, A. Githeko, M. Medany, B. Osman-Elasha, R. Tabo and P. Yanda. 2007. *Africa. 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, UK: Cambridge University Press: 433-467.

[4] OECD (2006). *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.

in Africa. The CCAPS climate coding methodology was developed in September 2011-May 2012. It was tested using active project documents collected from all ODA donors for all sectors of aid in Malawi.[5] Building on our previous collaborative work with AidData and Development Gateway, we 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 aid donor coordination, country adaptation planning and budget management, and stakeholder feedback and accountability.

The CCAPS climate coding methodology is driven by our 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. We seek to generate activity-level information to provide both a rich level of information on where climate aid has been mobilized and also to enable comparison to the OECD's Adaptation Marker system (discussed below). In this process, we hope 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.[6]

**The CCAPS Climate Coding Method: Overview**

The CCAPS method relies upon a robust coding exercise that draws from actual donor project documents collected via Malawi's Aid Management Platform and through direct contact with aid donors in country.[7] Each project document is read in full and coded for activities within the whole project. Each activity is then geocoded and climate coded 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 below.

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[5] For more information on the aid mapping work in Malawi, see Catherine Weaver and Christian Peratsakis. 2011. "Can Better Tracking of Adaptation Aid Reduce Climate Change Vulnerabilities on the Ground?" CCAPS Research Brief No.2.

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

[7] Weaver and Peratsakis 2011, op cit.

Figure 1: CCAPS Climate Coding Process
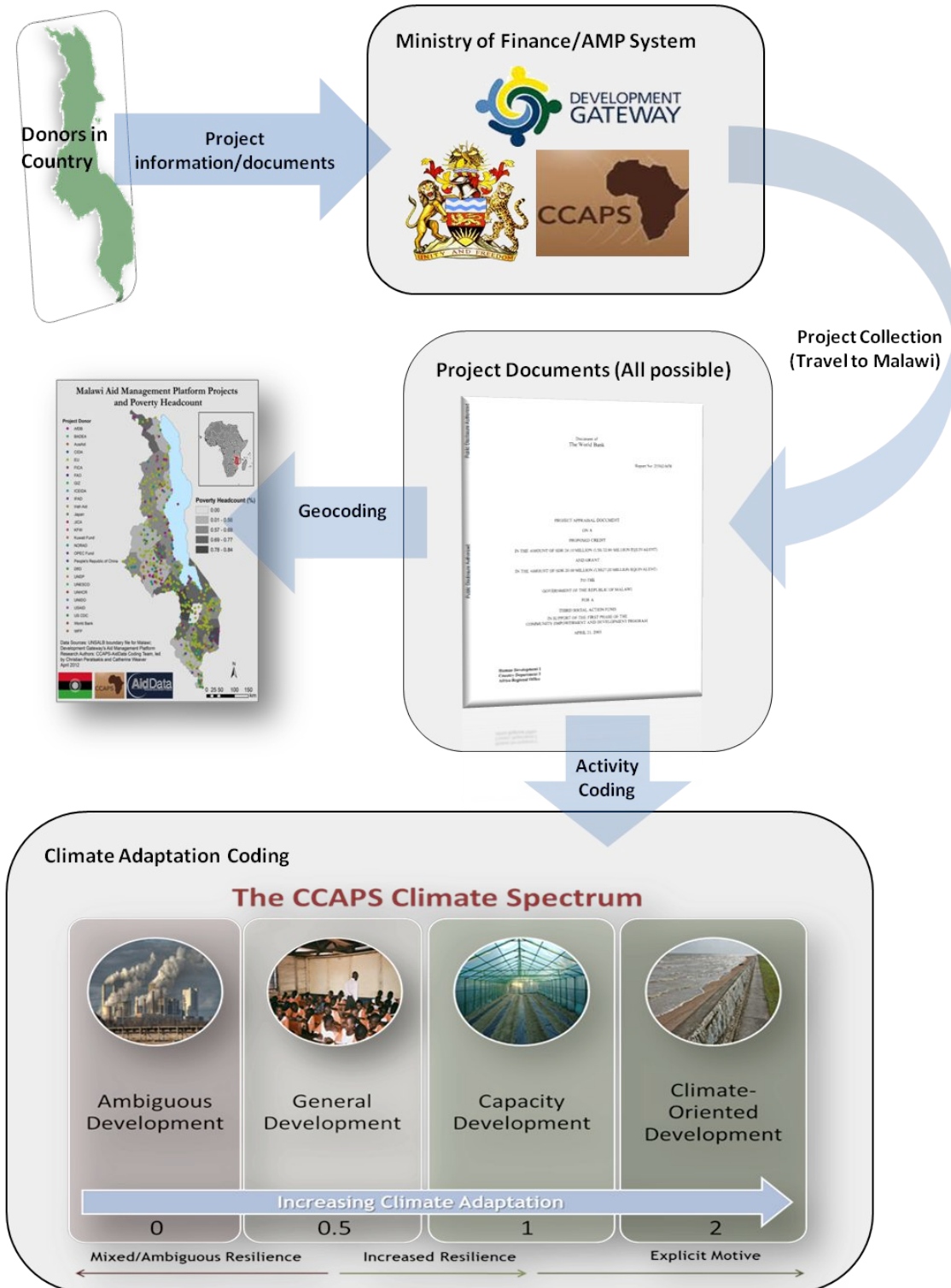
As indicated in the climate aid spectrum at the bottom of Figure 1, the CCAPS methodology codes for climate relevance of aid activities using a continuous *spectrum*. The spectrum includes four poles, ranging from *Ambiguous Development* (least benefit to adaptation, including maladaptation) to *Climate-Oriented Development* (most clearly designed to explicitly address climate issues). In between these are two categories. There is *Capacity Development,* which reflects activities that enhance resilience to climate change but are not explicitly carried out with that purpose in mind. Second, there is *General Development*, which 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, we assigned values of 0 to 2 along the spectrum, although critically these weights can be reassigned on our open-source data dashboard to enable end users to assign weight aligned with their own value judgments.

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 us to calculate a whole project score that can be any value between 0 and 2 (for example, a project may receive a total score 0.734, which falls between general development and capacity development). A deeper explanation of spectrum definitions, scoring, and a diagram of the spectrum are presented in the following sections. Importantly, we also ask 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 our method and to assess whether our more labor-intensive activity coding yields different (and arguably more accurate) results than project-level coding.[8]

Our method is thus different from extant methods, which rely upon short project descriptions (as opposed to coding full project documents) and code only at the project level. Our emphasis on activity-level coding is especially critical to our 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.

Our 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. 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

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[8] This exercise was conducted so that we 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 we predicted, the results did vary, thus indicating that activity-level coding was necessary. These results are discussed in detail in Baker, Peratsakis, and Weaver (forthcoming). "Tracking Climate Aid in Africa: The Case of Malawi," CCAPS Research Brief.

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. 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 among of development financing dedicated to mitigation or adaptation work.

The 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).[9]

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, it can be changed to *Climate-Oriented*. Coders also

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[9] Available from AidData: http://www.aiddata.org/content/index/user-guide/coding-scheme

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.

Figure 2: 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.*

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.

Step 4: Weighting Projects

After manual coding, each project will have multiple climate scores; one for each of its activity codes 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, time, etc. Building upon the Rio Markers (which uses a '0', '1' or '2' scale), the following scale was chosen on which to rate projects. Placing projects back on the spectrum by final score allows clear comparison to other coded projects.

AD	GD	CD	CO
0	0.5	1	2
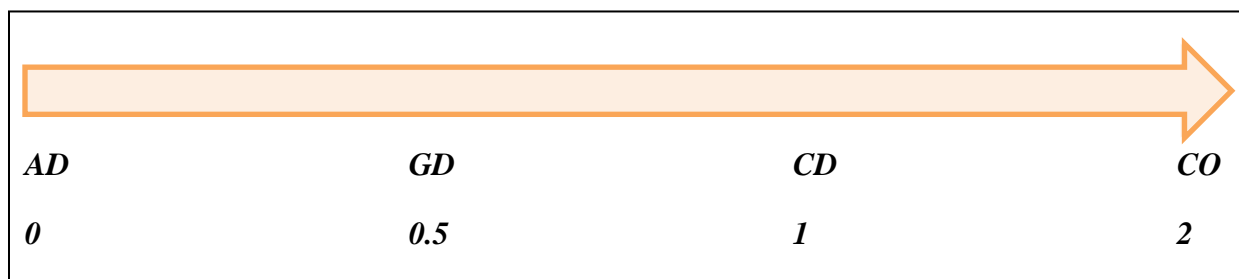
Along the spectrum each pole is given a score from '0' to '2' with equal distances between the categories except for *Capacity Development* and *Climate Oriented Development*, which is a larger gap because of the explicit aims of climate oriented development. A 0-2 scale is used for the purpose of relating to the OECD Adaptation Markers.

We note 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 we cannot be sure 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 / $n_{Activities}$) as in the equation below:

$$FS = 0.7*OS + 0.3*[\textstyle\sum AS / n_{Activities}]$$

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.

Conclusion

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. 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.

Initial results of the application of our climate coding methodology to aid projects in Malawi are discussed in Baker, Peratsakis and Weaver (forthcoming). For more information on the details of our method and data, please contact Dr. Catherine Weaver at ceweaver@austin.utexas.edu.

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