# Understanding Needs, Meeting Demands:

## A user-oriented analysis of online knowledge brokering platforms for climate change and development

*Anne Hammill, Blane Harvey, Daniella Echeverria*


*This brief presents the results and recommendations of research undertaken to understand how online climate knowledge brokering (CKB) platform users assess, access and apply knowledge. The research included interviews and surveys with over 200 users of online climate change information, as well as in-depth case studies of four CKB platforms. The results pointed to key issues with user behaviours and preferences, potential areas for innovation in online knowledge brokering (KB), and the need for taking CKB beyond its online functions. These findings will be of interest to those currently working in KB roles in the climate change community, those who are planning, funding or working in partnership with knowledge-sharing initiatives, and to knowledge brokers in other fields as a basis for comparative analysis.*

### Online KB for Climate Compatible Development

As more stakeholders take steps toward operationalizing climate compatible development (CCD), the demand for information and knowledge related to the concept is growing. KB plays an important role in managing gaps between research, policy and practice. KB is broadly understood as a set of intermediary activities that link knowledge production and use. It can range from making information more accessible and understandable, to helping different actors develop a shared understanding of an issue that allows for the co-production of knowledge. As the experiential knowledge needed for climate change planning and action may be embedded in widely dispersed communities or institutions and poorly documented (if at all), CKB is rising in prominence.

The massive growth of information and communication technologies (ICTs) has expanded the range of possibilities for KB, offering greater reach, more access and new technologies for storing, filtering and translating information and knowledge into new formats.

The recent proliferation of online CKB platforms[1] speaks to the power of ICTs for sharing resources and lessons learned, and facilitating interaction among those working on climate change. Yet online CKB platforms run the risk of being supply-driven, established and managed with the assumption that making more knowledge available online will result in evidence-based policy and practice supporting CCD. Platforms are not necessarily designed with a thorough understanding of user needs, which can result in services that are not fit for their purpose, gaps in information and knowledge provision, duplication of efforts and an overall misuse of resources. Moreover, most efforts at addressing the misalignment between knowledge supply and demand tend to focus on adjusting or expanding the supply. Unless knowledge brokers develop a clear understanding of what constitutes demand, these efforts will fall short of expectations.

The Knowledge for Action research project sought to answer the question, "How well do we understand the needs of those who use these platforms and to what extent are the platforms meeting their needs?" This question was explored through an analysis of 200 CKB platform users' needs, preferences and online information-seeking and knowledge-sharing behaviour. A broad user's survey and four case studies were conducted in an attempt to capture both the breadth and depth of issues (see Box 1).

[1] By *platform*, we mean a technology package that integrates a number of tools available in the marketplace (for purchase or for free) that one can acquire, install, or rent, which is then tailored for the use of a targeted user group. See E. C. Wenger, N. White & J. D. Smith, (2009). *Digital habitats: Stewarding technology for communities*. CPsquare. Retrieved from http://technologyforcommunities.com

**BOX 1: CASE STUDY CKB PLATFORMS**

- AfricaAdapt: An online knowledge network targeting African researchers and practitioners that facilitates the exchange of experience and best practice on climate change adaptation.

  *http://www.africa-adapt.net/*

- Climate Finance Options: A centralised source of information on climate finance to help policy makers and project planners in developing countries understand, navigate and successfully access climate funding.

  *http://www.climatefinanceoptions.org/cfo/index.php*

- Climate Change Policy and Practice: A repository and searchable archive of information on UN and intergovernmental news, events, and policy processes related to climate change aimed at policy-makers in governments, UN agencies and other intergovernmental organisations (IGOs).

  *http://climate-l.iisd.org/*

- Eldis Climate Change Resource Guide: An open access database of research resources, including introductory guides, abstracts and summaries on climate change and development issues targeted at policy-makers, NGOs, and researchers.

  *http://www.eldis.org/go/topics/resource-guides/climate-change*

## *What did we learn about CKB platform users?*

Platforms are largely used by research-oriented actors from both developed and developing countries

The predominance of research organizations and job profiles does not appear to align with the emphasis on policy-makers among many online CKB platforms and platforms may not be reaching important communities of intermediaries, such as the media.

### *The Internet is central to users' lives*

Internet proficiency and dependency is high; therefore, the potential value of online CKB platforms is growing. The case studies revealed that access to or quality of ICTs and Internet resources remains a key challenge for users of two platforms (AfricaAdapt and Eldis Climate Change Resource Guide), which have many users that reside in developing countries. Smartphones and tablets were not as widely adopted as the broad survey seemed

to suggest, cautioning us not to assume that the spread of mobile web access in the global South is unfolding smoothly and uniformly.

***Users look for documents to prepare documents and start the search at Google***

The most common professional tasks leading to online climate change research included preparing research reports, education and training materials, and funding proposals. Search engines such as Google and specific institutional websites, such as the UNFCCC's, were where people started their searches. Upon arriving at a platform, users tend to look for "paper-based" products like research reports, policy documents and journal articles. User preferences for documents have not necessarily kept pace with the availability of new technologies for visualizing data, posting multimedia content such as videos or stimulating user interaction through social media.

***Users prefer receiving information but are willing to share***

Most users in both the broad survey and case studies identified themselves as either occasionally or minimally active knowledge-sharers. However, the case studies did give further insight into the reasons for *not* sharing new knowledge. These issues must be addressed if we aim to promote wider co-production of knowledge among diverse climate change actors.

## Conclusions and Recommendations

***CKB platforms are not changing the way users initiate searches for information.*** Today's online search engines offer users a high level of control over their information-seeking, allowing them to engage in a more iterative process where they can tailor their searches as they learn more about what is available. **Investing in search engine optimization may make more sense than designing platforms as one-stop-shops that attempt to respond to a plethora of needs, as users are unlikely to have all of these needs met in one website and seem less likely to contribute knowledge to platforms that do not convey a clear focus.**

***Users still prioritize accessing information and knowledge in "traditional" (written) formats.*** **Platforms should not detract from the more basic knowledge management and information intermediary roles of capturing and curating information to help people access relevant resources and find their way through a glut of information.**

***...but wouldn't mind accessing people.*** There was an expressed desire among some users to be linked to other people and/or personal experiences. Platforms may have a tendency to offer technology-driven solutions, such as online rosters of experts and virtual spaces for discussion groups. However, **institutions must be willing to invest resources in dedicated and consistent facilitation of these services and spaces in order for this approach to work.**

***CKB platform users still prefer to receive information than share knowledge online.*** People seem to be aware of the range of outlets for sharing information and knowledge, but simply do not do so frequently. Given this, **further research could investigate the boundaries and differences, if any, between personal knowledge-sharing and what users share on CKB platforms** to gain a better understanding of barriers and incentives for sharing. Moreover, **the role of so-called "lurkers" on CKB platforms—those who access platform content but do not contribute—should also be explored, as they are increasingly recognized as important knowledge brokers who span online-offline boundaries, acting as online followers and offline leaders.**[1]

[1] See J. Cranefield, P. Yoong & S. Huff (2011), *Beyond lurking: The invisible follower-feeder in an online community ecosystem*. PACIS 2011 Proceedings. Paper 50. Retrieved from http://aisel.aisnet.org/pacis2011/50

***Platforms may be aligned with most user expectations (which remain modest), but out of sync with other expectations.*** Generally speaking, online platforms are doing a good job of addressing stated user needs and preferences; however, user expectations remain predominantly modest, focused primarily on the more linear information- and knowledge-intermediary functions. But user expectations are not the only driver of CKB platform behaviours. Those developing the tools and approaches may be keen to integrate more sophisticated brokering and innovation functions and technical features. Also, importantly, the agencies funding these platforms are increasingly expecting to see outcomes that go beyond users simply accessing knowledge resources.

***Should platforms drive or respond to demand for online KB?*** Linked to the previous point, we question whether demand for relatively basic information and knowledge management services is due to a more limited set of perceived needs in this field, whether needs for more co-constructive engagement are being met elsewhere or whether users might simply not be aware of the range of possibilities that exist were CKB platforms to function differently.

***Platforms should recognize the value of blending online and offline functions.*** **The more an online CKB platform strives to expand from performing information intermediary functions to include linking, tailoring and (re)interpreting this information to suit different decision-making contexts and foster change, the more important the role of facilitated human interaction.**

***Get to know your users! Despite their many commonalities, usership across CKB platforms is not homogenous.*** While this study has revealed a high degree of consistency among the responses from the general survey and the four case studies, there were some important differences that should not be overlooked. AfricaAdapt and the Eldis Climate Change Resource Guide reminded us that technological and information access barriers, access to handheld devices and differences in expectations continue to present a challenge to making broad generalizations. **Engaging directly with users and regularly tracking how they are evolving remains the only effective way to understand the specificities of a platform's usership.**

***Remember that CKB platforms are used by a small subset of CCD actors.*** Online CKB platforms are largely used by research-oriented users in developed and developing countries for preparing reports, educational materials and proposals. For the most part, policy-makers, media representatives, and local-level actors are not actively engaging with CKB platforms. Actors and regions that stand to lose the most in the face of climate change and play an important role in crafting appropriate responses to the challenge are not well represented via CKB platforms. While most platforms do not primarily target these so-called "frontline actors," some refer to them in their plans to expand or when describing the eventual beneficiaries of their services. If CKB platforms genuinely want to engage with such actors, they will need to go further and to integrate other tools and services such as radio, mobile phones and offline interactions into their work. Otherwise, CKB platforms are essentially online spaces established and managed by researchers for researchers in relatively privileged settings.

iisd International Institute for Sustainable Development / Institut international du développement durable

IDS Institute of Development Studies

CDKN Climate & Development Knowledge Network

*This document is an output from a project funded by the UK Department for International Development (DFID) and the Netherlands Directorate-General for International Cooperation (DGIS) for the benefit of developing countries. However, the views expressed and information contained in it are not necessarily those of or endorsed by DFID, DGIS or the entities managing the delivery of the Climate and Development Knowledge Network*, which can accept no responsibility or liability for such views, completeness or accuracy of the information or for any reliance placed on them.*

*Cover photo: Mary Waswa, MDE Project Facilitator, working with the National Digital Repository at the Malawi National Library Service. Credit: S. Colmer 2012*