

# Agricultural Communication & Climate: Understanding ACDC's Users & Collection

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## Introduction

The Agricultural Communication
Documentation Center (ACDC) at the
University of Illinois, Urbana-Champaign is
a growing collection of over 46,000 diverse
agriculture-related communications from
around the world. It is developed and
maintained by faculty and students in the
University Library, library and information
science and agricultural communications to
provide agricultural resources to teachers,
researchers, students, journalists and
communicators both locally and globally.

ACDC resources are often used in:

- class projects
- literature reviews
- research analysis

The physical collection is housed within the Funk Agricultural, Consumer and Environmental Sciences (ACES) Library and is accessible through a BibLeaves database.

# Purpose

This research will:

- inform researchers that the collection can contribute to their work on the subject of climate change communication
- share preliminary information about the collection's users & identify technologies that libraries can use for outreach and engagement to users of agriculture-related collections

## Method

The ACDC's Collection is primarily accessible through 'BibLeaves,' our online citation database system. These resources include books, newspapers, journals, pamphlets, reports, teaching material, media and archival collections.

A term frequency analysis of climate change communications document records from the ACDC Collection was conducted during the 2019-2020 academic year. Included in the analysis were the fields for subject terms, subject country, title words, and publication title. Results from MS Access queries were exported into MS Excel spreadsheets that included text and text frequency counts. Exported texts and frequencies were then imported into a word art tool to create word clouds. BibLeaves identifies related subject terms through the use of controlled vocabulary maintained by ACDC curators.

#### Results

To demonstrate the frequency of terms in select fields in climate change communications from document records in BibLeaves, word cloud images were generated. Increasing text size correlates with increasing frequency. Overall, less than 1% (403 records) of the ACDC Collection contains materials related to climate change. It is noted that "farmers" is the most frequent subject term and title word found in the BibLeaves database, and that "farmers" is one of the least frequent subject term found when searching "climate change".

Cloud 1: Frequency of Subject Terms when searching "climate change"

environmental quality
scientific communication
environmental communication
Climate change
public attitudes
politics

Cloud 2: Frequency of Subject Country when searching "climate change"



Cloud 3: Frequency of Title Words when searching "climate change"



Cloud 4: Frequency of Publication Title when searching "climate change"

Climate Risk Management
Public Understanding of Science
Environment Communication
Science Communication
Journal of Extension
Ecquid Novi: African Journalism

# Outreach & Engagement

The ACDC connects virtually with the agriculture community via:

- an online monthly newsletter
- digital exhibits
- social media (Twitter)

## **Next Steps**

Assessment of a 2020 user survey is ongoing.

Respondents use the ACDC to:

- monitor communications research
- track communications issues
- stay current on emerging media & methods
- share resources with colleagues

Current respondents have not indicated that they use the collection to access climate change communications.

One goal for 2020-2021 is to continually identify agriculture communication subject areas on which to focus outreach and engagement efforts. This knowledge will assist the ACDC in building stronger relationships with the University Library, the College of ACES and other stakeholders to improve awareness of the Center's services.

### References

BibLeaves Database (2020). Retrieved from https://bibleaves.library.illinois.edu/ WordArt. (2020). Word Clouds. Retrieved from https://wordart.com/

Zumalt, J. R. (2007). Identifying the Core Periodical Literature of the Agricultural Communications Documentation Center. Journal of Agricultural & Food Information, 8(3), 43–63. https://doi.org/10.1300/J108v08n03\_05

