1

BUILDING THE AfrED DATABASE

Caitlin Blaser Mapitsa

Background to the project

In 2015, a range of stakeholders in the African monitoring and evaluation sector, including the Centre for Learning on Evaluation and Results for Anglophone Africa (CLEAR-AA), the Centre for Research on Evaluation, Science and Technology (CREST), the South African Monitoring and Evaluation Association (SAMEA) and Twende Mbele, noted a gap in availability of empirical evidence in the African evaluation landscape. It further noted that this empirical data was fragmented. Stakeholders had differing perceptions about the scale of the field and the location of information. To address this, CLEAR-AA commissioned the Evaluation Research Agency, affiliated with CREST, to build a database of both peer-reviewed journal articles in the field of monitoring and evaluation, as well as evaluation reports.

Due to CLEAR-AA's mandate to support evaluation capacity development in the region, the database itself is a public good and can be accessed online by anyone interested.¹

The development of the AfrED database was a first step to capture and present information on evaluation-related research and evaluations themselves in Africa. By providing this empirical foundation about the landscape for evaluation, it is hoped that scholars and practitioners will be able to more accurately map the gap between supply and demand, propel forward specific debates that are heavily based on anecdotal evidence, and develop effective and appropriate evaluation capacity building interventions.

Scope of the database

The boundaries on the scope of the database were agreed on for pragmatic reasons. The database aims to capture academic journal articles, conference presentations, evaluation reports, terms of reference, and other clearly related evaluation documents between the years 2005 and 2015.² Only open access articles and reports were considered, due to the need for the resultant database

¹ https://crest2.sun.ac.za/african_evaluation_db/default/african_eval_db_01

² Acknowledgement: This is an adaptation of the Evaluation: Database and Survey Report, written by the Evaluation Research Agency, which was commissioned to build the database. Any mistakes remain those of the author.

to be open access. The geographical scope currently covers 12 sub-Saharan Anglophone countries:

1. Botswana	7. Rwanda
2. Ethiopia	8. South Africa
3. Ghana	9. Tanzania
4. Kenya	10. Uganda
5. Namibia	11. Zambia
6. Nigeria	12. Zimbabwe

Methodology

Academic articles

CREST extracted from the Thomson Reuters (TR) Web of Science database all articles from the 12 selected countries for the period 2005 to 2015. In this first extraction a number of keywords were entered in order to identify possible academic papers in the field of monitoring and evaluation (M&E). These keywords were: evaluation, impact assessment, monitoring and performance. The output files for the respective countries were subsequently imported into our Access database (CREST Evaluation Database). A total of 4503 unique papers were imported. For the Web of Science papers, these keywords were only applied to the 'article title' field as a broader search across other fields yielded too many results.

The second step of the process then involved a visual inspection of the article titles by the project lead. This manual process was time consuming but focused on eliminating "obviously irrelevant" papers in the field of the natural resources (such as the impact of climate change on crop production) or papers that reported on clinical trials. The end result of this process produced a list of unique evaluation papers by country. As a result of this process, a total of 543 unique evaluation papers remained.

Up to this point, the manual inspection of the database utilised the article title field. However, there were concerns that the title would not necessarily adequately indicate whether the study was in fact an evaluation study. The third step was to relink the 543 papers and extract them again from the Web of Science (WoS) database, but now with the Abstract of the paper included. Another round of manual inspection of the list of papers followed, taking into account the additional information provided by the paper Abstract. The end

result of this process was that 435 unique evaluation papers remained. The final step involved relinking the papers – through their unique identifier IDs – with the TR Web of Science in order to re-insert additional fields.

CREST extracted from the Elsevier Scopus online version of the database all articles from the 12 selected countries for the period 2005 to 2015. In this first extraction, the same keywords (as above) were entered to identify possible academic papers in the field of M&E. In this case, as we were working with the online version, these keywords were applied to the article title, abstract and keywords fields. The output files for the respective countries were subsequently imported into the Access database (CREST Evaluation Database). A total of 41687 unique “evaluation” papers were imported. A subsequent filtering process applied these same keywords only to the article title field. As a result of the second filtering process, a total of 12083 unique papers remained. After visual inspection 285 unique and appropriate evaluation articles remained. These records were merged with the 435 unique articles extracted from the Web of Science. At this point a final check revealed that there were some duplications between these two data files and these were removed. This resulted in a final datafile of 658 unique evaluation articles in the database.

This process reflected the situation of the evaluation sector: search terms were not necessarily effective, due to the use of monitoring and evaluation related terminology outside the sector, as well as varied use of semantics within the sector. This required an iterative process to define the scope of the database and the most effective way to fit within this scope. It also required actual engagement with the research methods section of each evaluation study, to ensure its relevance.

In the iterative definition process, it became clear that evaluation should be limited to refer to project or programme evaluation in the field of social services. Specifically, the database aims to target evaluations of interventions that are relevant to human development. This excludes the large bodies of literature that are evaluating natural events or physical phenomena. Even with this focus, there is still a large grey area of evaluations that are not technically of projects or programmes, but still relevant to the database. Table 1.1 below gives some examples of studies that were excluded, since they did not address programmes. On the other hand, those that may be looking at systems, policies, etc. are also included as they are deemed sufficiently relevant to the audience of the database.

Table 1.1 Illustrative studies for exclusion or inclusion in the database

Excluded study	Included study
The accuracy of mobile teleradiology in the evaluation of chest X-rays	Evaluation of the Agricultural Information Service (AIS) in Lesotho
Evaluation of spatial and temporal characteristics of rainfall in Malawi: A case of data scarce region	Impact of digital revolution on the structure of Nigerian banks
Mixed methods evaluation of targeted selective anthelmintic treatment by resource-poor smallholder goat farmers in Botswana	The impact of financial integration in Botswana

Source: Mouton, Burg & Wildschut, c.2017.
Close-out Report on the AfrED Database

Evaluation reports

The process of identifying evaluation reports was more challenging. While academic journal articles are already indexed by a relatively small number of recognised role players, the evaluation space is not as coordinated. As a result, this process was less exhaustive, but created many important methodological lessons.

Concurrent with the downloading of scientific papers from international citation databases, commissioned evaluation reports/studies/working papers were downloaded from major international bodies that fund and commission such studies. The major web sites and online databases identified for this task are listed below and cover:

- Government and parastatal websites in the selected countries;
- Major NGOs operating in these countries; and
- The websites of the main international donors that work in Africa.

The process involved the following steps:

1. Identification of appropriate websites with databases of evaluation studies or reports (often through snowballing).
2. Reports that were produced between 2005 and 2015 for the countries included in this study were downloaded. These reports are currently archived in folders on a server at Stellenbosch University.
3. The core metadata that were available for these downloaded reports was entered into an Access database.

The results of these currently form part of the first version of the African Evaluation Database (AfrED). In addition, the documents have been downloaded and are available through a web-based Open Access repository. The African Evaluation Database contains the following standard bibliographic metadata (fields in the database):

1. Author(s)
2. Author affiliation (organisation)
3. Author affiliation (country)
4. E-mail address of corresponding author
5. Article title
6. Source
7. Document type (article, review, book review, report, policy document, etc.)
8. Year of publication
9. Keywords
10. Sector
11. URL Link to document

Table 1.2 provides information on the number of reports included in the database by source organisation.

Table 1.2 Number of documents by source organisation

Source	No of reports
3ie	713
Government Website	383
Sida	352
ALNAP	252
OECD	192
UNICEF	115
NORAD	111
USAID	88
MEASURE	78
UNEG	73
DANIDA	61
DFID	60
IFAD	60
World Bank	22
UNAIDS	6
Other sources	69
Total	2635

The process of sourcing evaluation reports was not exhaustive, which is one of the major limitations of the ability to use the AfrED database to generalise about the sector in the region as a whole. The scope of the databases contributing to

this study was ultimately limited by the availability of resources. The developers of the database do not make claims that it is exhaustive, and it is inevitable that certain important sources of evaluations have not been included. These include evaluation reports by the Department of Planning, Monitoring and Evaluation (DPME) in South Africa. CLEAR-AA is already in the process of identifying important gaps, and in the second phase of the database development an effort will be made to be more systematic and exhaustive in identifying and including evaluation reports.

Description of the database content

This section presents some results from a preliminary bibliometric analyses of the datafile on evaluation articles (n=658).

Figure 1.1 presents the output by year for the period 2005 to 2015. The decline in numbers of papers in 2015 is most likely due to the lag in indexing such papers, which is common to both the WoS and Scopus databases. The overall trend shows that the current production of evaluation-specific articles (by African authors) averages around 85 per year.

Figure 1.1 Output of the year for the period 2005–2015

Only a very small number of articles (n=19) have been published in evaluation specific journals.

Table 1.3 Articles published in dedicated evaluation specific journals

Source title	No of papers
Journal of Testing and Evaluation	3
Evaluation and Programme Planning	3
New Directions in Social Impact Assessment: Conceptual and Methodological Advances	3
American Journal of Evaluation	2
Environmental Impact Assessment Review	2
Impact Assessment and Project Appraisal	1
Evaluation and Research in Education	1
Evaluation Review	1
Assessment & Evaluation in Higher Education	1
Research Evaluation	1
Journal of Evaluation in Clinical Practice	1
Total	19

Survey methodology

Recognising that the people behind the evaluation studies in the database represented an extensive collection of practitioners and experts in the field of evaluation in Africa, CREST combed the database for the e-mail addresses of contributing authors and evaluators. While the evaluation studies represent a valuable source of information about evaluation practice (the meeting place between supply and demand), the analysis of the database would be more robust with additional information about the background of those who participated in AfrED's evaluation studies. A survey instrument was designed to better understand the demographic profile, origin, educational background and professional identity of the individuals in the AfrED database.

Between 10 and 29 November 2016, e-mails were sent to 3032 persons identified as individuals involved with evaluations in Africa. Eligible candidates for the survey were obtained from three sources.

- ▶ The documents listed in the African evaluation database were examined and all e-mail details of authors recorded.
- ▶ E-mails were obtained from the South African, Ethiopian, Ghanaian and African Evaluation Associations.
- ▶ E-mails from CREST's own internal database (previous students of evaluation and a list of various individuals making enquiries).

Based on these sources, 3032 individuals were sent an invitation to participate in the survey. Of these, 426 e-mails returned undelivered and nine individuals indicated that they did not want to participate in the survey. We, therefore, assume that around 2597 individuals received the invitation. Each e-mail contained a description of the survey, some information regarding CLEAR-AA and CREST, and a request to participate in the survey. In total, 549 individuals indicated their willingness to complete the survey. These 549 individuals were then sent a subsequent e-mail with a link to participate in the survey. A reminder was sent after one week to complete the survey. Of the 549 persons who agreed to complete the survey, 421 completed the survey. On 11 November, the remaining 2051, who had not indicated their willingness to participate, were e-mailed a link to the survey. Of these 2051 individuals, 139 completed the survey. There were also 4 individuals who completed the survey through a general link provided. By 4 January (the date on which the survey was closed), a total of 564 individuals had completed the survey. This amounts to a 22% response rate.

Limitations

An initial challenge, faced by both the database designers and the authors in this book, is that the AfrED database is a first of its kind in the region. As a result, the research questions from the database were not yet well established. For an initiative like this database, an iterative process can be expected of analysing the available data, focusing the research questions, and revisiting the data collection strategy. Having now reviewed the database and mapped out trends, gaps and key areas for research, important sources for evaluation reports and important fields of metadata are missing. However, due to a need to ensure an ongoing contribution to rapidly evolving debates, it is important to work with what we have while building what we need.

One of the most significant limitations of the database is around evaluations not included, due to a combination of limited resources and also a larger than expected pool of academic journal articles in the evaluation space. Accessible databases of evaluations were included, while some of the more difficult to access, importantly including public sector evaluations, particularly those with decentralised evaluation systems, did not form part of the database. Many evaluations from the public sectors of countries in the region that are leading in evaluation systems development are not included in the database. This means that the conclusions we draw about evaluations should not be generalised

across the sector, but rather seen as indicative of certain trends. The conclusions also raise pertinent questions.

Finally, the database has limited metadata and as websites are updated, links expire quickly. In a future iteration of the database, first the research team has a much better understanding of the kind of metadata we need for the database to be a valuable contribution to scholarship in the region. Having engaged with many evaluations in detail, it is also more clear what the challenges are to accessing data in certain categories.

Way forward

The first iteration of the AfrED database has been an important first step both in generating data on the evaluation landscape that has contributed to this book, but also in understanding key sources of information and how to navigate them. The process of writing this book, and engaging with the material in the database, has been critical in determining future directions for growth.

The concluding chapter of this book will discuss priorities for future research and the second iteration of the database, expected in 2019, which will continue to provide an empirical foundation for understanding the evaluation landscape in Africa.