# APPLYING EVIDENCE: WHAT WORKS?

## A RAPID LITERATURE REVIEW
## OCTOBER 13, 2017

Prepared by DEXIS Consulting Group
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# CONTENTS

## ACRONYMS LIST

| | |
|---|---|
| **CLA** | **Collaborating, Learning, and Adapting** |
| **DEC** | **Development Experience Clearinghouse** |
| **DFID** | **Department for International Development** |
| **EB4CLA** | **Evidence Base for Collaborating, Learning and Adapting (EB4CLA)** |
| **EIA** | **Office of Evaluation and Impact Assessment, US Global Development Lab** |
| **ERL** | **Evaluation, Research, and Learning** |
| **IFPRI** | **International Food Policy Research Institute** |
| **MEL** | **Monitoring, Evaluation, and Learning** |
| **ODI** | **Overseas Development Institute** |

# PURPOSE

This review provides a summary of existing literature on using evidence to inform ways the US Global Development Lab (the Lab) and Agency as a whole could improve its evidence-based decision-making practices. This information will contribute to the Lab's Office of Evaluation and Impact Assessment (EIA) by: 1) refining the Lab's hypothesis that using evidence to drive decision-making leads to better programs, operations, and strategies; and 2) informing ways the Lab designs and implements its Evaluation, Research, and Learning (ERL) Plan.

# METHODOLOGY

A research team conducted an electronic search for documents to identify academic papers, white papers, grey literature, and USAID documents. The team searched Google and Google Scholar search engines, DeepDyve, and other academic article and journal sites. Additionally, the team reviewed an existing literature inventory for LEARN's Evidence Base for Collaborating, Learning and Adapting (EB4CLA) work, USAID documents from the Knowledge Services Center, and individual recommendations of relevant literature from development practitioners.

The authors identified 137 documents that met the following inclusion criteria: an international development focus; a more empirical approach rather than a theoretical one; and a focus on evidence applied by practitioners in implementing programs. While the majority of documents (98) were obtained using the electronic search, 39 additional documents were identified by snowballing from citations in reviewed sources. Annex 1 provides a detailed summary of the literature themes; Annex 2 has more detail on the methodology; and Annex 3 contains a link to the Annotated Bibliography.

# CONCLUSIONS

**DOES USING EVIDENCE TO DRIVE DECISION-MAKING "MAKE A DIFFERENCE" IN INTERNATIONAL DEVELOPMENT? WHAT IS KNOWN? WHAT IS NOT KNOWN?**

| What Is Available | What Remains Unclear |
|---|---|
| Recommendations, commonly based on experience, for how to improve evidence-based decision-making | Clear support that evidence-based decision-making contributes to better development results |
| Importance of contextual factors in decision-making | Agreed-upon definition of evidence |
| The majority of research surveyed comes from the healthcare, education, social services, and criminal justice sectors along with the social science academic field | Definitive substantiation on specific approaches or interventions to improve the use of evidence |
| | Research, as it is limited, on applying evidence in the international development field |

**THE LITERATURE REVIEW DID NOT REVEAL RESEARCH THAT SUPPORTS THE USE OF EVIDENCE TO IMPROVE INTERNATIONAL DEVELOPMENT RESULTS.** To note, this reinforces findings from LEARN's literature review on collaborating, learning, and adapting (CLA) approaches and their contribution to development results; evidence is only beginning to emerge on this front. However, this evidence — some carried out by LEARN — has not specifically focused on evidence-based decision-making.

**THE LITERATURE REVIEW DID POINT TO SOME CLEAR RECOMMENDATIONS, USUALLY BASED ON EXPERIENCE, ON WAYS TO SUPPORT EVIDENCE-BASED DECISION-MAKING TO INFORM INTERNATIONAL DEVELOPMENT PROGRAMMING.** In addition, there is some evidence available on the efficacy of specific interventions to improve the usage of evidence, although this also tends to be inconclusive. A summary of these recommendations and interventions are included below in the "On which evidence-use practices do we have the most evidence?" . Research also points to the importance of context in understanding evidence-based decision-making. There is an awareness that organizational- and sector-level factors matter when applying evidence to decision-making. Within healthcare and education, for instance, such factors include norms, incentives, and the broader context (e.g., timing, resources). In addition, the role of individual beliefs and attitudes toward using evidence are commonly cited (e.g., whether the evidence aligns with existing beliefs and opinions around the best methodologies for generating evidence).

**THE LITERATURE DOES NOT CLEARLY DEFINE** *EVIDENCE*. Notably, only two types of evidence products are mentioned in the context of international development: evaluations and systematic reviews. There is neither recognition of the potential linkages between evidence utilization and existing international development processes such as USAID's Program Cycle or the Department for International Development's (DFID's) SMART Rules, nor are there connections to how to integrate and apply evidence in areas such as procurement, reporting, and performance monitoring, evaluation, and learning (MEL) processes. In addition, the literature does not refer to the use of working papers or assessment documents, often used by donors and development practitioners, in generating evidence to inform work.[1]

While there is still much work to be done to organize the dispersed literature on evidence-based practice, one thing is clear: in complex and constantly shifting environments, simple models of decision-making (rational, linear, sequential, with clear separation between evidence and utilization) have limited efficacy in facilitating the use of evidence in practice. This suggests that interventions to resolve these issues will need to reflect the various factors at play in shaping decision-making.

## ON WHICH EVIDENCE-USE PRACTICES DO WE HAVE THE MOST EVIDENCE?

The majority of research surveyed comes from the healthcare, education, social services, and criminal justice sectors along with the social science academic field. Much of the literature underlines a general lack of systematic evidence on strategies to improve evidence utilization (Breckon and Dodson, 2016; Moore, Redman, Haines, Todd, 2011). Despite this, there remains a larger evidence base on the efficacy of specific interventions cited within the social sciences field that are often linked to improving evidence use (Breckon and Dodson, 2016). While there may be little evidence on the efficacy of awareness-raising initiatives that focus on sharing evidence to improve evidence utilization, for example, there is evidence for the efficacy of social marketing, social incentives, identity cues, and user engagement (Breckon and Dodson, 2016). The literature focuses heavily on the gap between research and practice in which evidence of what works in a particular field is not translated appropriately into actual practice (Nutley, Walter, and Davies, 2002)

In general, the literature suggests that simpler interventions and the simultaneous use of multiple interventions are more likely to improve evidence use (Langer, Tripney, and Gough, 2016; Breckon and Dodson, 2016). The literature draws a distinction between intervention types, including "awareness"-raising; communication-related- or access-to-evidence interventions; and those focused on building skills, motivation, and opportunity to use evidence (Langer, Tripney, and Gough, 2016). Combined intervention packages are often cited, with most mentioning embedding evidence use into existing

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[1] Unlike informal assessments, often systematic reviews tend to be a rigorously defined literature review aimed at answering a specific research question and often use statistical tests to derive conclusions across multiple studies.

organizational processes; providing access to, and communications about, evidence; and providing skills, and motivation, for using evidence. The literature on key practices for improving evidence use follows in descending order of support, in terms of the number of papers and amount and quality of evidence cited within the literature.[2] The literature heavily emphasizes the importance of:

- **UNDERSTANDING AND BEING AWARE OF ORGANIZATIONAL CONTEXT AND POLITICAL FACTORS THAT INFLUENCE THE UNDERSTANDING AND USE OF EVIDENCE (BRADT, 2009; COURT & YOUNG, 2003).** In addition, the literature recommends an awareness and understanding of the individual decision-maker(s), their information needs, their skills and capacities, and their relationships and influencers (Crewe and Young, 2002; Davies, 2015; Young and Mendizabal, 2009). Since donors do not generally produce much of the literature, it is possible that the think tanks and research organizations who do emphasize those organizational factors that represent their particular challenges to seeing their research used by those within international development. The relatively smaller body of literature from donors, however, demonstrates an acute recognition of institutional and organizational constraints, including staff turnover, incentives, and norms. This suggests that organizational context within development donors is likely as much of a challenge for those attempting to influence from "within" the organization as much as those trying to influence from "outside."

- **EMBEDDING THE USE OF EVIDENCE INTO EXISTING ORGANIZATIONAL STRUCTURES AND PROCESSES AND BUILDING THE CASE FOR EVIDENCE USE.** The literature notes that this intervention is often tied to other interventions, such as building individual skills on how to use and understanding evidence and providing communications about and access to evidence. These types of interventions support the formalization and institutionalization of other practices, such as access to evidence, communications about evidence, and training to improve motivation and support for evidence usage (Breckon and Dodson, 2016). The literature also recommends linking evidence to policy priorities and goals, as well as to planning, budgeting, and reporting processes, to integrate evidence application in organizations (Shaxson, Datta, Tshangela, and Matomela, 2016). Beyond improving organizational norms and incentives to increase evidence use (Scott, 2011), the literature also points to practical experiences of improving evidence use among donors, such as DFID's internal Quality Assurance schemes, or embedding analysts into appropriate teams (Yaron and Shaxson, 2008).

- **PROACTIVELY TRANSMITTING, ACCESSING, AND TRANSLATING THE EVIDENCE TO DECISION-MAKERS, KEY INFLUENCERS, AND THEIR NETWORKS VIA CUSTOMIZED, ACCESSIBLE PRODUCTS WITH TAILORED MESSAGING AT THE APPROPRIATE TIME THAT AVOIDS JARGON.** This both provides opportunities and generates motivation, for the use of evidence (Breckon and Dodson, 2016). Other highlights include understanding audiences through segmentation (dividing a large group of users into smaller sub-groups, or *segments*, based on shared characteristics), as well as providing multiple modalities for access to evidence (such as printed documents, online platforms, and in-person events). Persistence through regular communication, as well as maintaining flexibility in

> "Understanding audiences through segmentation as well as providing multiple modalities for access to evidence was highlighted. The literature focuses on being persistent with regular communication as well as maintaining flexibility in determining the best approach and means to communicate."
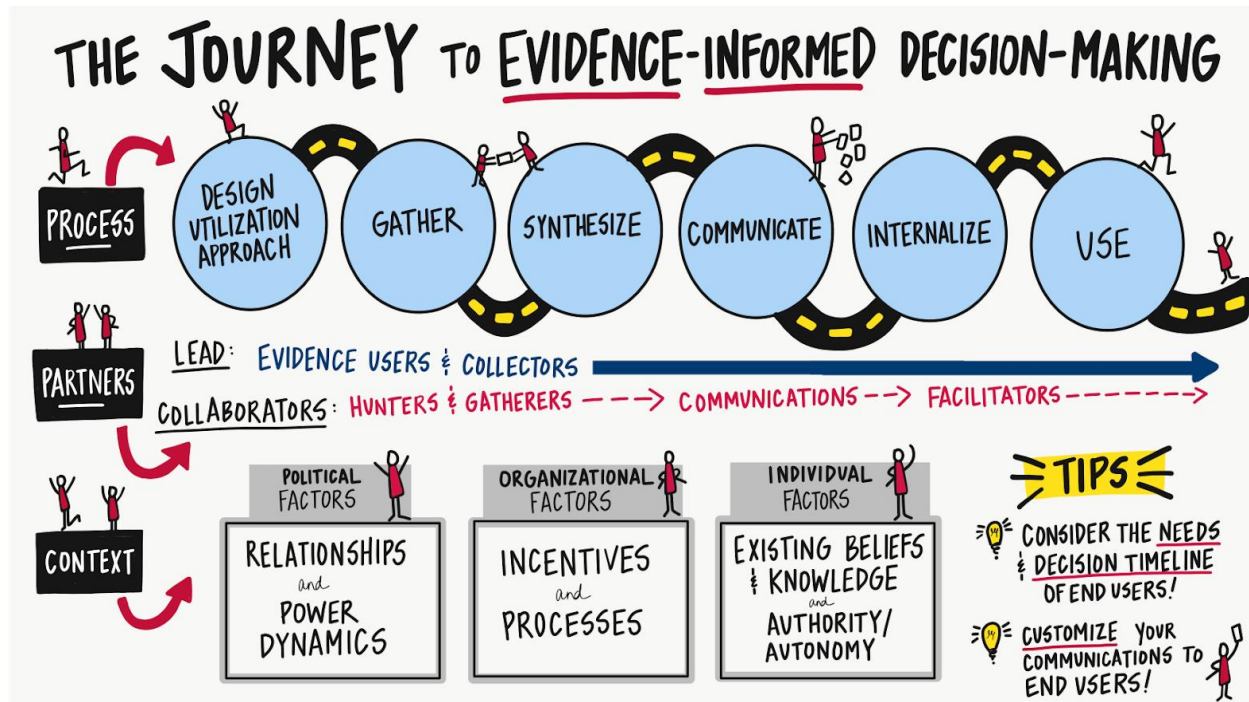
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[2] This draws heavily on the recent comprehensive literature review of Breckon and Dodson, 2016, and Langer, Tripney, and Gough, 2016.

determining the best approach and means to communicate is also important. For instance, the use of different types of media, using visual design principles when developing platforms, and providing resources such as hotlines and help desks are all suggested as potential avenues (Langer, Tripney, and Gough, 2016; Breckon and Dodson, 2016). The findings of one study suggest that providing blog-type content written by trusted experts in health policy and research, in addition to regular email reminders, provided an effective means of disseminating the latest research to policymakers through an online web portal (Makkar, Gilham, Williamson and Bisset, 2015). Communication goes beyond information dissemination to include techniques such as framing, tailoring, and providing reminders to aid decision-makers in applying evidence. For instance, framing the evidence by using a combination of words and numbers (i.e., absolute versus relative numbers), telling stories to communicate research, using social network platforms, and creating a recognizable brand can increase the use of evidence (Breckon and Dodson, 2016).

- **BUILDING THE CAPACITY OF INDIVIDUALS TO UNDERSTAND AND SEE THE VALUE OF EVIDENCE.** Awareness-raising interventions alone have little evidence of success in improving the use of evidence, but building the skills and motivation to use evidence showed promise (Breckon and Dodson, 2016). In particular, efforts to build positive attitudes toward evidence use are highlighted as an important complement to awareness-raising work. Marketing the benefits of using evidence in work was also emphasized. This includes social marketing, professional recognition, and norm setting which have been shown to improve evidence uptake (Breckon and Dodson, 2016). The literature also mentions the importance of ensuring that individuals have a solid understanding of the data itself (John Snow, Inc., 2015) as well as formal training on research methods that can support evidence-based decision-making (Black, Balneaves, Garossino, Puyat and Qian, 2015). The use of formal training also appears to have more solid empirical evidence regarding its efficacy. For example, one review noted that critical appraisal training that aims at building the capacity of individuals to analyze evidence worked particularly well, as did university courses and continuing professional development (Breckon and Dodson, 2016).

- **COLLABORATING PROACTIVELY AND ENGAGING WITH DECISION-MAKERS IN THE PROCESS OF DESIGNING THE GENERATION AND ANALYSIS OF EVIDENCE.** The literature does not provide evidence of the independent impact of either seeking agreement on policy-relevant evidence, nor interactions between evidence producers and decision-makers. However, the concept of engagement between decision-makers and evidence producers is mentioned most often by authors involved in research institutes and think tanks such as ODI. The lack of evidence in this space is likely due to fuzziness of terms such as *interactions*, which makes measurement challenging. There is, however, evidence that social influence, mentoring, online engagement, and joint practice development are effective. In addition, interventions that are effective at producing agreement on the definitions of evidence such as Delphi panels and journal clubs were also cited (Breckon and Dodson, 2016). Recommendations on operationalizing the role of relationships and networks in evidence utilization include using interactions to support the development of professional norms and conduct, rather than just for the dissemination of information; understanding the costs and benefits of interactions between evidence generators and users; and understanding through network mapping the decision structures of decision-makers (Breckon and Dodson, 2016).

> "Target and tailor the engagement of decision-makers more carefully - while considering, in particular, decision-makers' opportunity costs and benefits from the engagement."

The figure below summarizes many of the key themes discussed above. It provides an overview of the process leading to evidence use, the key stakeholders that should be involved, and contextual factors that affect whether evidence gets used.



THE JOURNEY TO EVIDENCE-INFORMED DECISION-MAKING

PROCESS — DESIGN UTILIZATION APPROACH · GATHER · SYNTHESIZE · COMMUNICATE · INTERNALIZE · USE

PARTNERS —
LEAD: EVIDENCE USERS & COLLECTORS
COLLABORATORS: HUNTERS & GATHERERS ——> COMMUNICATIONS ——> FACILITATORS ———————>

CONTEXT —
POLITICAL FACTORS: RELATIONSHIPS and POWER DYNAMICS
ORGANIZATIONAL FACTORS: INCENTIVES and PROCESSES
INDIVIDUAL FACTORS: EXISTING BELIEFS & KNOWLEDGE and AUTHORITY/AUTONOMY

TIPS
CONSIDER THE NEEDS & DECISION TIMELINE OF END USERS!
CUSTOMIZE YOUR COMMUNICATIONS TO END USERS!

## WHO HAS STUDIED THIS? HOW HAS IT BEEN STUDIED?

While research institutes, think tanks, and individual practitioners or academics have generated most of the research, donor community contributions in this regard are more limited. Qualitative and case study methods inform almost all of the analyzed research and, in international development, it tends to be heavily anecdotal and theoretical in nature.[3] Development practitioners, in particular, almost exclusively use qualitative data in supporting their work, including to inform their recommendations on how to improve the use of evidence. In literature reviews performed by development professionals, there is often literature that is quantitative in nature; but this represents literature outside of development, including the social sciences.

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[3] This overlaps with a theme mentioned in the literature regarding the lack of commonly understood norms around the use and application of evidence within international development. This may explain the propensity of international development-generated content to focus on "selling" the idea of using evidence to improve decisions or providing a theoretical grounding for the use of evidence.

# ANNEX 1: DETAILED SUMMARY OF THEMES ACROSS LITERATURE

In the development sector, there is growing interest in designing policies and practices better informed by evidence. There is widespread enthusiasm for "evidence-based decision-making," but limited recognition of the difficulties of devising effective strategies to ensure that evidence is integrated into policy and utilized in practice. However, other sectors such as healthcare, education, social services, and criminal justice can serve as models in the ways they prioritize the use of evidence to inform professional practice.

Most of the data on the use and application of evidence in the literature emphasizes five themes:

1. Defining the term *evidence*
2. Identifying the roles of political, organizational, and individual factors as enablers and constraints on evidence use
3. Appreciating and leveraging relationships, networks, and communications
4. Providing the types of evidence products — evaluations and systematic reviews — referenced to inform decisions
5. Theorizing supporting decisions informed by evidence change management

## THEME 1: DEFINING EVIDENCE

Much of the literature recognizes the challenges present in defining the term *evidence* (Bradt, 2009; Knaapen, 2013; Davies, 2015). One article that summarizes attempts at improving the use of agricultural research notes the root of this failure is often in not managing contested visions (Hall, 2011). Addressing differences in understanding of what constitutes evidence is often cited as a first step in ensuring the application of evidence in decision-making (Davies, 2015 and Breckon and Dodson, 2016; John Snow, 2015). While evidence is sometimes equated as statistical data (Commission on Evidence-Based Policy, 2017), others suggest using a broader definition of evidence (Shaxson, Datta, Tshangela, and Matomela, 2016). Often this focus on statistical data also connects to the often cited "gold standard" of randomized controlled trials. The literature notes that this is sometimes impractical and has been criticized as too narrow as it restricts alternative methodological designs such as observational studies, knowledge produced by disciplines like medical anthropology, and potentially disregards solutions not easily tested in randomized clinical trials (Knappen, 2013).

In addition, the literature does offer some alternative framings of the use of evidence such as "evidence-informed," in part recognizing the presence of other factors, including politics, in making decisions (Parkhurst, 2017; Georgalakis, Jessani, Oronje, and Ramalingam, 2017). In particular, this shift of language can link to a recognition that decisions are informed often by other factors, including the context in which the decision takes place. Furthermore, there is a recognition that development decisions often involve other values beyond evidence, including coordination and consensus-building (Parkhurst, 2017; Bradt, 2009). Furthermore, the types of decisions made in development often differ markedly from the types of considerations typically invoked in the medical profession from which the term *evidence-based decision-making* is commonly thought to have emerged (Bradt, 2009).

In addition, the definition of evidence continues to be debated within the medical field. One article discusses three main common types of evidence, which are not incompatible with each other, and can be used to inform guidance on evidence-based decisions in health: medical effectiveness research; social-science oriented research; and the expertise, views, and realities of stakeholders (Lomas, Culyer,

McCutcheon, McAuley and Law, 2005). Furthermore, those involved in public health have also attempted to construct evidence hierarchies that move beyond the traditional sole criterion of effectiveness (Parkhurst and Sudeepa, 2016; Petticrew and Roberts, 2003). These might include assessing evidence on areas such as its salience, safety, or risk concerns, as well as social acceptability and cost effectiveness (Petticrew and Roberts, 2003).

TRANSITION Some authors noted the difference between *utilization* and *influence* since documents can be used but may not be influential in making decisions. Use and influence were grouped into three categories: project implementation and administration, political support, and the process and culture of evaluation (World Bank, 2009)

## THEME 2: ROLE OF POLITICAL, ORGANIZATIONAL, AND INDIVIDUAL FACTORS

Often mentioned in the literature are a number of overarching factors related to political considerations often coinciding with an assessment of the evidence. These include the roles of belief and ideology as well as the nature of the relationship between the evidence producer and evidence user. Additionally, timing and resources may influence the relevance and salience of evidence (Crewe and Young, 2002; Davies, 2015; Young and Mendizabal, 2009). Relatedly, some sources emphasize the need for evidence to be received at the "right time" (World Bank, 2005; EuropeAid, 2014; Segone (ed.), 2008). The literature also notes the importance of continuing resources for research efforts to generate evidence for use (Institute of Development Studies, 2007; Segone (ed.), 2008 Ravallion, 2009). Another theme in the literature was the need to take into consideration the wider context and culture of a particular organization or technical area, such as humanitarian work, where decisions can be based to a greater degree on eminence and expertise as opposed to evidence (Bradt, 2009; Court & Young, 2003). Furthermore, the literature notes cultural attitudes toward use of evidence and the potential to have to make sense of evidence in a particular context (Johnson, Greenseid, Toal, King, Lawrenz, and Volkov, 2009).

For example, one study that focused on analyzing interviews with health policymakers (Innvaer, Vist, Trommald and Oxman, 2002) found a variety of perceived facilitators of, and barriers to, the use of evidence. The most commonly reported facilitators and barriers were personal contact (or lack), timely relevance (or lack), and the inclusion of summaries with policy recommendations (lack of relevance). Other commonly reported barriers were mutual mistrust as well as power and budget struggles. The takeaway from the study is that two-way personal communication can facilitate evidence use but cautioned such communications promote selective use of evidence.

One case study examined a collaborative project that involved community health pilot projects in western Kenya. The authors concluded that the success of the project lie with the emphasis on continued engagement, appropriate timing, and building the capacity of decision-makers (Georgalakis, Jessani, Oronje, and Ramalingam, 2017). A summary of a series of research projects designed to improve ways to use agricultural research noted how important user demand was and the importance of including a wider range of stakeholders in the process (Hall, 2011). Authors often refer to the theme of engagement, including structuring the process in different steps, for instance, having decision-makers in the lead to extract the main messages from the research results (Van Kammen, De Savigny, and Sewankambo, 2006).

## THEME 3: RELATIONSHIPS, NETWORKS, AND COMMUNICATION

The role of relationships, networks, and knowledge intermediaries is a recurrent theme. This ranged from the importance of trust-based relationships to the need for knowledge intermediaries to support

the translation of evidence that may be more academic in nature for the use of practitioners [Jones and Mendizabal, 2010; Department for International Development (DFID), 2014; Crewe and Young, 2002; Laney, 2003]. Beyond the relationships, some studies focused on the role of communications in support of evidence use. Specifically, it is important to tailor messaging and ensure user-friendly and accessible communications (Barnard, Carlile, and Ray, 2007). Another theme is the use of new and social media and design thinking to inform development and choice of products and increase the availability of and access to evidence (Langer, Tripney, and Gough, 2016). Additionally, when these products have practical recommendations or solutions there is greater use and application of evidence (Ramalingam, 2011; Court and Young, 2003). Finally, much of the literature stresses the need to be persistent, flexible, and adaptive in any approach. For example, the mapping context referred to as *strategic opportunism* helps identify windows of opportunity for greatest impact and influence (Sumner, Ishmael-Perkins, and Lindstrom, 2009).

For example, one case study involving the International Food Policy Research Institute (IFPRI) notes the importance of an intentional and systematic communication strategy such as using established relationships, developed over a long period, along with media engagement through blogs, social networking sites, face-to-face presentations, and meetings by providing information on the food price crisis. As a result of these efforts, seven of IFPRI's eight recommended urgent actions appearing in the United Nations' Comprehensive Framework for Action on food security [Department for International Development (DFID), 2011]. Another case study examines the policy decision-making process in Netherlands that successfully translated evidence into policy. Here, the research process was such whereby the researchers extracted the main messages from the research results and an institutional broker translated the messages within the framework of the policy context. The credibility and independence, often concepts closely aligned, of the institutional broker organization was cited as a major factor in the success (Van Kammen, De Savigny, and Sewankambo, 2006).

> "Even when good-quality, relevant, and reliable research is available, straightforward application is difficult. That is largely because research is rarely self-evident to the practitioner and its interpretation varies according to the context in which it is received and deployed. Individuals tend to make decisions based on the interaction between explicit and tacit knowledge gathered through previous experience."

The literature also mentions a series of constraints and enablers for evidence-based work. First, much of the literature on evidence-based practice is focused on the individual psychology of decision-making and the different types of research or knowledge utilization. For example, a continuum can be drawn between the instrumental use of research (resulting in changes in behavior and practice) and conceptual research (bringing about changes in levels of knowledge, understanding, and attitude; Huberman, 1993). The literature focuses heavily on the gap between research and practice in which evidence of what works in a particular field is not translated appropriately into actual practice (Nutley, Walter, and Davies, 2002). Research shows that evidence cannot be separated from its social context. Several studies suggest that successful implementation of research involves a focus on local ideas, practices, and attitudes, and a should engage the interest and involvement of decision-makers (Nutley, Walter, and Davies, 2002). Even when good-quality, relevant, and reliable research is available, straightforward application is difficult. That is largely because research is rarely self-evident to the practitioner and its interpretation varies according to the context in which it is received and deployed. Individuals tend to make decisions based on the interaction between explicit and tacit knowledge gathered through previous experience.

**TABLE 1: SUMMARY OF ENABLERS AND CONSTRAINTS TO EVIDENCE USE**

| Enablers | Constraints |
|---|---|
| Interest and involvement of decision-makers (Nutley, Walter, and Davies, 2002) | Lack of social norms (Langer, Stewart, and De Wet, 2015) |
| Leadership and champions for the use of evidence in decision-making (Jones, Jones, Steer, and Datta, 2009) | Need for organizational incentives to apply evidence (Scott, 2011) |
| Credible evidence producers (Ryan, 2002; Jones and Walsh, 2008) | Cultural attitudes toward use of evidence (Johnson, Greenseid, Toal, King, Lawrenz, and Volkov, 2009) |
| Decentralized decision-making Honig & Gulrajani, 2017) | Agreement on definition of *evidence* (Bradt, 2009; Knaapen, 2013; Davies, 2015) |
| Appropriate Timing and Resources (Crewe and Young, 2002; Davies, 2015; Young and Mendizabal, 2009) | Amount of time to make decisions (Bradt, 2009) |
| Knowledge Intermediaries to translate evidence [Jones and Mendizabal, 2010; Department for International Development (DFID), 2014; Crewe and Young, 2002; Laney, 2003] | |
| Tailored messaging, user-friendly and accessible communications (Barnard, Carlile, and Ray, 2007). | |

At the organizational level, the literature identifies a need for organizational incentives that encourage the application of evidence (Scott, 2011), but notes the lack of social norms around evidence use in development (Langer, Stewart, and De Wet, 2015). Authors emphasize the importance that internal organizational leadership, including individuals, champion the use of evidence in decision-making (Jones, Jones, Steer, and Datta, 2009); there is also a need for evidence producers to have credibility with their audiences (Ryan, 2002; Jones and Walsh, 2008). Credibility is generally attained with authoritative research or that produced by international organizations as well as when the evidence is perceived to be independent from potential bias. In addition, supporting evidence-based decision-making requires specific decision tools, knowledge translation, and change in management strategies (Ferguson, Mchombu, and Cummings, 2008; Knaapen, 2013; USAID, 2016). Others noted the importance of appropriate processes including how evidence is incorporated into policy making. Policy processes ideally involve different stages, from agenda-setting to formulation to implementation. Evidence therefore has the potential to influence the policymaking process at each stage. However, some noted that different evidence and different mechanisms may be needed different stages of policy development.

**THEME 4: EVIDENCE PRODUCTS: EVALUATIONS AND SYSTEMATIC REVIEWS**

Within the development context, the literature discusses two common documents used in evidence generation: systematic reviews and evaluations. While systematic reviews have utility in other sectors, such as health, some authors discuss their limitations in the development sector (Malletta, Hagen-

Zankerb, Slaterc, and Duvendack, 2012; Boaz, Ashby, and Young, 2002), while others maintain their appropriateness for the international development sector (Malletta, Hagen-Zankerb, Slaterc, and Duvendack, 2012). The literature mentions the need in development for reviews that include qualitative data to understand such development relevant concerns as "when," "why," "how," and "for whom" the interventions "work" (Davies, 2015; Hansen, Trifković, 2015). Literature on evaluations emphasizes the importance of timing and context for uptake and use of evaluation recommendations (Johnson, Greenseid, Toal, King, Lawrenz and Volkov, 2009;). At USAID, evaluations often feed into Project and Activity designs (USAID, 2016). Additionally, the quality of the evaluation and credibility of the evaluator were commonly cited as important to uptake (Sandison, 2006 Johnson, Greenseid, Toal, King, Lawrenz, and Volkov, 2009). One action research study that used a mixed-method approach to improve evaluation use for learning found that individuals within an organization are more likely to learn with a supportive organizational context, structure, and process (Taut, 2007).

### THEME 5: THEORIES AROUND EVIDENCE APPLICATION CHANGE MANAGEMENT

The literature mentions a number of theories around application of evidence. These include those related to innovation diffusion, social marketing, social incentives, and identity cues and "nudges" (Nutley, Walter, and Davies, 2002; Herie and Martin, 2002). There are a number of principles identified in the literature for ensuring the use of evidence in decision-making. These include understanding and engaging with the target audience throughout, assessing the needs and identifying specific demands of users, and ensuring ongoing engagement with and between users and producers of evidence (Breckon and Dodson, 2016; Shaxson, Datta, Tshangela, and Matomela, 2016). This relates to lack of trust, perceived lack of credibility, or inability to use the evidence, all often-cited barriers to the utility of evidence (Court, Hovland, and Young, 2005; Jones and Walsh, 2008).

> "The literature mentions a number of theories around application of evidence. These include theories related to innovation diffusion, social marketing, social incentives, identity cues and 'nudges.' There are a number of principles identified in the literature for ensuring the use of evidence in decision-making. These include understanding and engaging with the target audience throughout, assessing the needs and identifying specific demands of users, and ensuring ongoing engagement with and between users and producers of evidence."

# ANNEX 2: LITERATURE REVIEW METHODOLOGY

USAID LEARN conducted a desk review of existing inventories and resources, primarily the Evidence Base for Collaborating, Learning and Adapting literature review, related to the topic. This desk review identified relevant literature for inclusion. The electronic search used the following initial key search terms[4]:

1. *Evidence-based* AND *decision-making* OR *Evidence based* AND *decision-making* AND *international development*
2. *Data driven* OR *data-driven decision-making* OR *decision-making* AND *international development*
3. *Impact of evidence on international development* OR *impact of data on international development*
4. *Feedback loop/s* AND *international development*
5. *Results based management* AND *international development*
6. *Evidence utilization* OR *evidence use* AND *international development*
7. *Evaluation utilization* OR *Utilization-Focused Evaluation* AND *international development*
8. *Research into use* AND *international development*

USAID LEARN also scanned existing inventories and resources to identify other relevant search terms to include, expand, or clarify following this desk review. Identified literature was placed into the draft list of literature.

USAID LEARN also analyzed a request placed with USAID's Knowledge Service Center, who will query USAID's records located on the Development Experience Clearinghouse (DEC), using the following terms:

1. *Evidence-based* AND *decision-making* OR *Evidence based* AND *decision-making* AND *international development* OR *development*
2. *Data driven* OR *data-driven decision-making* OR *decision-making* AND *international development* OR *development*
3. *Impact of evidence on international development* OR *impact of data on international development*

## ELECTRONIC SEARCH PROCESS

The literature search was restricted to cover the period 2000 to 2017. The following electronic databases were searched (in addition to the DEC): JSTOR, Project MUSE: Scholarly Journals, Google Scholar, Google search engine, and DeepDyve. In addition, searches of other donor and organization websites were conducted of the following: DFID, Institute of Development Studies, World Bank, and the Overseas Development Institute (ODI).
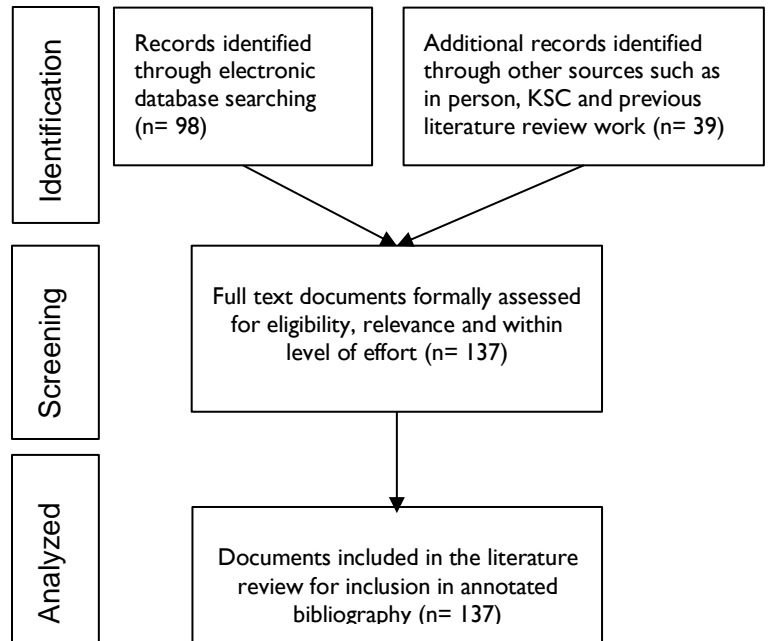
Configured for the appropriate electronic databases, the search terms included:

1. *Evidence-based* AND *decision-making* OR *Evidence based* AND *decision-making* AND *international development*
2. *Data driven* OR *data-driven decision-making* OR *decision-making* AND *international development*
3. *Impact of evidence on international development* OR *impact of data on international development*
4. *Feedback loop/s* AND *international development*
5. *Results based management* AND *international development*
6. *Evidence utilization* OR *evidence use* AND *international development*

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[4] The last search term was added following the beginning of the literature review to capture different ways of using evidence-based initiatives in development work.

7. *Evaluation utilization* OR *Utilization-Focused Evaluation* AND *international development*
8. *Research into use* AND *international development*

The team reviewed the first 200 entries of the electronic searches conducted online and in the databases of interest. Articles that appear to meet the criteria were included in a list for consideration. This criteria included whether the document had an international development focus, was empirical in nature and focused on evidence being applied by practitioners in implementing programs. In addition, select journals were also separately searched using the same terms to cover publications or publication dates not otherwise covered in the database search. These could include: World Development, Journal of Development Studies, Oxford Development Studies, Development Policy Review, Studies in Comparative International Development, Sustainable Development, European Journal of Development Research, Development and Change, Journal of International Development, Third World Quarterly, Public Administration and Development and Development in Practice.

**Identification**

Records identified through electronic database searching (n= 98)

Additional records identified through other sources such as in person, KSC and previous literature review work (n= 39)

**Screening**

Full text documents formally assessed for eligibility, relevance and within level of effort (n= 137)

**Analyzed**

Documents included in the literature review for inclusion in annotated bibliography (n= 137)

Finally, development practitioners and experts were contacted to identify additional studies that had been missed by the search. This was conducted through using listservs, such as #adaptdev, focused on related topics. This helped identify USAID documents and other literature that should be included.

## SELECTION

Once duplicates were removed and the list had been screened, the following selection criteria were applied to the list and divided into three tiers for prioritizing the literature using the same above criteria. In the end all three tiers were reviewed. The total list of documents at this point was 98. These documents were then read, reviewed, and core information detailed in an annotated bibliography. This included the Title, Author, Year, Reference type, Published, Abstract, Primary Sector, Geographic focus, and Key facts/findings. During the review process, additional documents were identified using a snowball methodology of commonly cited or relevant literature. This increased the total number of reviewed documents from 98 to 137 in total.

Following this, a list of key findings was enumerated that aided in identifying key themes. The documents were then categorized across all themes. These themes also support the identification of key findings shared in the above literature review.

Following the annotated bibliography, the documents were synthesized and summarized for the above literature review section that focuses on one key research question with a group of sub-questions:

- Does using evidence to drive decision-making "make a difference" in international development?
    - What is known? What is not known?
    - Who has studied this? How has it been studied?
    - What are considered "best practices"? How has evidence been used in different organizations/contexts? Which practices should we strive to adopt in the Lab/the Agency?

# ANNEX 3: ANNOTATED BIBLIOGRAPHY

The Annotated Bibliography presents the literature that the research team analyzed. It includes a number of fields including the title/citation of the document, the type of document, the publishing date, the link where available, the technical sector or geographical area covered by the document, a summary of the contents of the document, and a summary of the key findings including which thematic area is covered by the document. The annotated bibliography also provides a count of the number of themes covered by the document and whether it is a "key text." Key texts were judged by the research team to be particularly worthy of highlighting due to their coverage of the main focus of this literature review. Typically, these are documents that address a wide array of the themes identified by the research team. The bibliography also indicates if the document was originally obtained through the search or was added through a snowball sample.

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