







Accessing, understanding, and using evidence to improve the design and implementation of food security and nutrition interventions

A guide in eight steps



About 3ie

The International Initiative for Impact Evaluation (3ie) is an international grant-making NGO promoting evidence-informed development policies and programs. We are the global leader in funding, producing and synthesizing high-quality evidence of what works, for whom, why and at what cost. We believe that better and policy-relevant evidence will make development more effective and improve people's lives.

About ACED

<u>ACED</u> is an independent non-profit organization based in Benin that works on the most important challenges of food and nutrition security. They combine research, policy, and local action to reduce poverty and hunger in the most vulnerable communities. They act as a think-and-do tank.

About this guide

This guide, Accessing, understanding, and using evidence to improve the design and implementation of food security and nutrition interventions: a guide in eight steps, is available on https://epanetwork.org and the 3ie website. The content of the guide is also available as a self-paced online course that can be accessed at https://epanetwork.org.

All content is the sole responsibility of the authors and does not represent the opinions of 3ie, ACED, their donors, or their boards of commissioners. Any errors are also the sole responsibility of the authors. Comments or queries should be directed to the corresponding author, Etienne Lwamba at: elwamba@3ieimpact.org.

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Accessing, understanding, and using evidence to improve the design and implementation of food security and nutrition interventions: a guide in eight steps

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Executive summary

Evidence is the available body of information that validates or denies an argument or claim. It consists of robust information that can help to transform strategic priorities into concrete and achievable plans. In the absence of evidence, decision makers jump blindly into interventions that have no impact or do harm as well as good. Therefore, it is important to ensure that evidence is gathered and used in a reliable way to inform decision-making. This can be achieved by making evidence accessible both physically (producing, finding, and gathering existing evidence) and technically (simplifying and synthesizing evidence).

In this guide, 3ie provides decision makers in the food security and nutrition sectors some tips and good practices illustrated by real examples. This guide will be useful for both evidence producers and users, in their journey to evidence-informed decision-making.

The use of evidence can notably contribute to the following decisions: changes in policies or programs, closure of a program, improvement in the culture of evidence use, informing discussions of policies and programs, informing global guidelines, informing the design of other programs, and scaling up a program. We also identify eight steps and recommendations to access and use evidence for informed decision-making, as outlined below:

	Step	Key takeaways
1	Ask yourself the right questions	 What kind of evidence do you need? There are three categories: Academic evidence presents the objective results of research Practical evidence can include technical expertise from implementers Social evidence is subjective and perceptions based How can you use evidence to support the purpose of your intervention? For instance, evidence can help: Shift policies Design better programs and projects Improve program implementation

	Step	Key takeaways				
2	Determine the scope of your evidence base	 Ask yourself what problems need to be addressed Situate your research/learning question in a theory of change (ToC) and ground it with evidence Have clear objectives, target population, and outcomes for your research question Identify what evidence exists and what is needed Utilize the context, evidence, and links framework to define the boundaries of your evidence base 				
3	Determine the type of evidence you are looking for	 Determine what types of data are relevant Primary vs. secondary Qualitative vs. quantitative Descriptive vs. evaluatory 				
4	Conduct a search for evidence	 Academic catalogs Academic websites Catalogue databases Development Evidence Portal Gray literature Organizational websites Agencies and international organizations NGOs and/or private sector resources Stakeholder engagement Social networks Personal networks and connections 				
5	Translate your evidence into findings	 Be aware of the source of your body of evidence (primary or secondary) Be aware of the type of data you are using Adopt a structured approach to synthesis to make the best use of available evidence by reporting on: Technical quality Size and scope Context Evidence on what works and what doesn't Evidence on costs 				
6	Bring the evidence into your concrete context	 Link your evidence to your project ToC through an iterative process: the ToC informs your search for evidence, your findings inform edits on your ToC Be aware that evidence can inform many aspects of your ToC, including the context, issues, intervention design, expected outputs and outcomes, and pathways to success or failure 				

	Step	Key takeaways				
7	Present your findings	 Do not neglect dissemination and uptake of your evidence: evidence is only impactful when used by decision makers Ask yourself three key questions to maximize uptake of your evidence: What is the story you are trying to tell? Who are you targeting? How can evidence best be delivered? What type of decisions can the target audience undertake based on the evidence? 				
design and impler implementation of future of fuctorial decisions and impler implement implement of future of the standard impler implement implement of the standard impler implement imp		 Be aware of the interdependence between the researcher and implementer when incorporating MEL in the implementation Make use of MEL tools to make your project a source of evidence for future interventions Understand the importance of impact evaluations for learning and ascertaining the effectiveness of future intervention 				

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Abbreviations and acronyms

EGM	Evidence Gap Map
MEL	Monitoring, Evaluation and Learning

NGO Non Governmental Organization

ToC Theory of Change

Introduction

What do we mean by "evidence?"

Evidence is the body of information used to validate or deny an argument or claim. It consists of robust information that can help to transform strategic priorities into concrete, manageable and achievable plans. Evidence can be primary or secondary information such as documentation of processes, interviews with beneficiaries, field observations, theoretical insights, satellite pictures, monitoring data, evaluations, and studies. Collected evidence can be grouped into three distinct categories:

- Academic: based on empirical findings which are objective, replicable, and generalizable. They are not necessarily published in peer reviewed journals.
- Practical: technical expertise
- Social: subjective and perception based information related to values and personal experiences.

Why should I use evidence?

Implementers work within several resource constraints; using evidence can help ensure the most effective use of these limitations. Evidence can highlight lessons learned and identify improved solutions to known problems in implementation or research. It can inform program design and implementation as well as policymaking.

When should I use evidence?

Your evidence journey should begin early and carry through till the end of your intervention. Strong and intensive collaboration between operational and research aspects of an intervention can increase efficiency and impact, leading to the production and dissemination of practical technical evidence.

How do I know what evidence to use?

Your role as an implementer is to identify, synthesize, present, and use evidence for decision-making. However, not all forms of evidence are equally important or relevant. Parameters such as accuracy, objectivity, credibility, generalizability, relevance, and practicality are all critical in ensuring that evidence is related to the objective at hand. More broadly, evidence should be:

- Empirically based
- Systematically collected
- Trustworthy
- Of a minimum level of quality

As an implementer, you are both an evidence producer and an evidence user. Through the process of monitoring, evaluation and learning (MEL), your work can inform researchers and other implementers. Similarly, the work of other implementers can inform yours.

What is the purpose of this guide?

Evidence use can be challenging. One third of the World Bank's policy reports have never been downloaded (Marschall 2018). In the food system and nutrition sector, there is often a lack of physical and technical access to evidence, or information on how it can be used by implementers. A <u>recent needs assessment</u> conducted by ACED with NGOs in the food security and nutrition sector found a high level of interest on the issues of evidence use, yet very few had experience in sourcing evidence, such as online databases, platforms, helpdesks, (ACED, 2021) etc. Most NGOs identified access to evidence as the primary reason preventing them from using evidence.

This technical guide aims to help implementers to navigate the process of accessing, understanding and using evidence in this sector. The guide explains how to find, access and understand the existing body of evidence, and how this evidence can be translated to inform decisions at all levels. This will ultimately contribute to a larger use of evidence for decision-making.

Who is this guide for?

The guide is particularly targeted toward implementers, specifically, decision makers - the individuals who influence, plan and execute interventions and policies and use evidence to do so. This can include both producers and users of evidence. We are not assuming any specific skillset or knowledge and would encourage everyone to pursue the use of evidence in their decision-making process.

Evidence producers include organizations and individuals that collect, verify, and disseminate information.

Evidence users leverage evidence to verify and promote agendas, programming, and outcomes. They include organizations and individuals that rely on evidence to inform their intervention, policy, and programming decisions. NGOs, monitoring and evaluation staff, researchers, implementers, consultancy firms, policymakers, and donors all produce and use evidence.

How should you use this guide?

This will walk readers through each step of the evidence-based decision-making process. Before you begin, it is critical to understand the mechanisms behind the process and to understand its relevance in these particular contexts.

- Part I will guide you through the why and how of evidence use in similar situations in the food security and nutrition sphere.
- Part II will outline the first steps that allow us to gather evidence.
- Part III will help you to extract and synthesize relevant evidence and enable you to better understand how to make sense of extracted information and contribute to the production of evidence.

As a whole, this guide serves as practical guidance on the use of evidence for intervention design and dissemination. While it is possible for someone to commit a significant amount of time to follow each of these steps in an exhaustive manner, decision makers can also employ this guide selectively and focus only on the portions most relevant to them. We encourage you to spend as much time as would be helpful and feasible on each of these steps and to focus on the areas that will give the most value in your specific context.



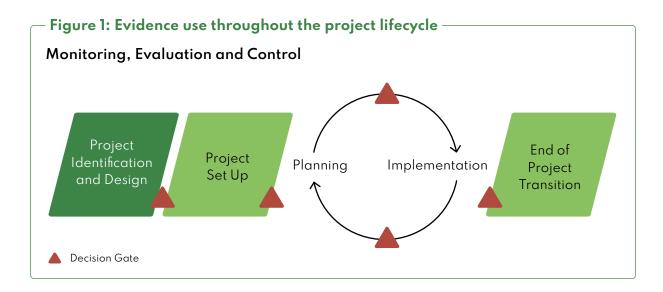
What is "evidence-informed decision-making?"

Key points -

- Evidence-informed decision-making is the use of empirical data, information, or knowledge to choose a set of actions, programs, or policies to be taken.
- Evidence-informed decision-making requires both the production and use of evidence.

Evidence can be utilized to improve the environment and quality of life for vulnerable populations through improved programs, policies, and legislation. According to the United Nations Millennium Development Goals, "evidence-based policy making refers to a policy process that helps planners make better-informed decisions by putting the best available evidence at the center of the policy process." We prefer the term "evidence-informed decision-making" over "evidence-based policy"- or "decision-making". Evidence should be used in all decisions, not just those around large-scale policy; however, we recognize that it is not the only element impacting decisions. However, the phrases are often used interchangeably.

Evidence-informed decision-making emphasizes the fact that informing stakeholders, including implementers, about evidence can create higher quality and more credible processes, leading to improved results. In international development, stakeholders are generally interested in evidence linking the planned activities and achieved outputs, outcomes, and impacts. The process of evidence-informed decision-making can help decision makers and development stakeholders to implement appropriate and sustainable actions. Evidence-informed decisions can be used at any level of an intervention (the international, regional, national, and local levels). Evidence use can provide confidence for action, but it cannot provide cast-iron guarantees of success. We advocate for all decision-making to be rooted in systematically and consistently collected evidence. Evidence should be employed throughout the project lifecycle, as illustrated in the project lifecycle, Figure 1 below:



*"A quick guide to the PMD Pro".

https://www.projectmanagersagainstpoverty.org/docs/QuickGuideToPMDPro.pdf

During **project identification and design**, evidence can support the identification of critical needs and effective approaches for addressing these needs.

During **project set up** and **planning**, evidence can be used to identify and ensure the adoption of effective intervention activities and approaches.

During **project implementation**, evidence can be used to change approaches that are not working well and adopt new implementation approaches through adaptive management.

During the **end of project transition**, evidence can be used to justify project scaling or closure.

Example of evidence-informed decision-making

Evidence can be drawn from several different sources to improve the design of ongoing projects. Implementers of a program training farmers on new and improved agricultural methods may use their own monitoring data to determine the outcomes of their program. If these outcomes are not as expected, they can use published literature and interviews of beneficiaries to determine why results are poor and update their intervention design. For example, implementers could find that small scale farmers are not willing to make changes to their process without seeing that they work. As a result of this evidence, implementers could support test plots within the community.

Evidence-informed decision-making requires both the production of evidence and its use by decision makers. Evidence can only have an impact when it reaches the hands of decision makers and they make use of it. Decision makers can be any stakeholder who is able to impact a policy, program, project, or intervention. They can then be project designers, project managers, mayors, or ministry officials.

Why does evidence-informed decision-making matter?

Key points -

- Evidence-informed decision-making leads to better programming and greater impact of development programs.
- Evidence-informed decisions allow greater effectiveness, transparency, and efficiency.

Evidence is a key resource in the development and implementation of impactful programming. In 2006, the Center for Global Development published *When Will We Ever Learn? Improving Lives Through Impact Evaluation.* They observed that a great deal of money is disbursed in development programs, but we know very little about their net impact. This lack of evidence is due to the scarcity of impact evaluations and the incentives to conduct them. It leaves decision makers with poor knowledge as to how to effectively spend resources on interventions that work (Evaluation Working Group 2006). Since publication of the report, emphasis has been placed on increasing access to information, improving data collection, and conducting quality evaluations. Evidence-informed decision-making allows for:

- Effectiveness: mitigating the risk of impactless or harmful programs
- Transparency: increasing accountability of the decision-making process
- Efficiency: reducing the risk of waste of resources and ensuring value for money

Example of evidence-informed decision-making

The World Health Organization (WHO) makes extensive use of evidence in their policy making. Programmers adopting WHO policy are, therefore, also using evidence. For example, recommendations for breastfeeding were developed through a systematic review process. The GRADE (grading of recommendations, assessment, development, and evaluations) confidence rating scale was applied to each recommendation in the guidelines. As such, practitioners can understand: (1) what the recommendations are; (2) the strength of the evidence supporting each recommendation; and (3) where to look for additional information regarding the guidelines. By using evidence in this way, the World Health Organization ensures that their recommendations are sound and justify why they should be followed. Programmers relying on WHO policy can be assured that their decisions based on these policies are informed by rigorous evidence.

When and how can evidence be used for more effective food security and nutrition interventions?

Key recommendation -

• Evidence should be used to change policies and programs; decide on program closure or scaling; increase a culture of evidence use; inform discussions, guidelines, and design.

Rigorous evidence is important to design and implement food and nutrition interventions. There are seven primary ways evidence is used across a project or policy life cycle (Rao 2021).

Agenda setting and project identification

This entails bringing awareness to a specific issue. Evidence can be used by implementers to build a business case or concept note that will advocate for the prioritization of an issue or intervention by donors and policymakers.

- Inform discussions of policies and programs: Evidence should be used as the basis of informed programming and policy discussion, including prioritization of issues, identification of promising approaches, and decisions for scale-up. For example, following a 3ie evaluation, the World Food Program's Ecuador country office carried out a local market analysis to identify sale points for the exchange of food vouchers. The SPRING project used descriptive evidence to focus the global conversation on the relationship between water, sanitation, and nutrition and to prioritize interventions to address these issues. It highlights the number of people affected by malnutrition and the relationship between WASH and nutrition in order to motivate the discussion to address these complex, interrelated issues.
- Inform global guidelines and policies discussions: Evidence should be used as the basis of global policy discussions, which ultimately drive the decisions about which interventions to fund and implement. For example, a 3ie evaluation was featured in the United Nations Environment Program's global study of trade in environmentally sound technologies. The study cites the evaluation as a resource to understand the effectiveness and limitations of payments for ecosystems services as part of green industrial policies. The Scaling Up Nutrition Movement represents a global platform through which the United Nations General Assembly can frame and host discussions on our progress towards the nutrition-related Sustainable Development Goals. Funders and implementers are encouraged to refer to this platform when determining which interventions to pursue.

Example of use over the life cycle of a program: Evidence from market monitoring showing increases in food prices and decreases in food availability indicates early signs of food insecurity in a conflict region. Demographic information is used to determine the potential scale of the impacted population. Together this information causes a crisis response agency to collect more detailed food security data to demonstrate the need for additional programming.

Design

This entails determining programming and policy options and selecting the preferred option. Implementers use evidence to design their interventions and select the activities that are most likely to achieve desired impacts in their local context while ensuring project efficiency.

• Inform the design of programs: Findings from an evaluation or review can inform the design of new programs. For example, findings from a 3ie-supported evaluation particularly those related to administrative challenges and the provision of iron and folic acid tablets to out-of-school children - informed the design of Evidence Action's pilot supplementation interventions in India. The Global Alliance for Improved Nutrition (GAIN) conducted formative work to identify drivers of poor eating habits in adolescents, prioritize behaviors requiring change, and pilot potential interventions. Example of use over the life cycle of a program: Direct food aid is a common approach to addressing food insecurity in conflict-affected settings. However, other options include reducing food loss and sustaining production in these regions. A crisis response agency can use quantitative evidence to compare the impacts of interventions that provide hermetically sealed storage bags, fertilizers, and food on nutrition outcomes in conflict-affected settings. Qualitative evidence can indicate what worked well within these interventions and what challenges were faced. Combining the impact evidence with the program implementation evidence, implementers can decide which intervention to implement and how best to implement it.

Implementation

Implementers build on the best practices and lessons identified during the design phase to make decisions during the intervention. This can include adaptive management and using evidence as the need arises. Once you identify what data exists and doesn't, you can adapt the learning questions and MEL plan to fill in the missing gaps. Existing data, or lack thereof, can then be used to update and determine your indicators. In addition, new evidence can be identified during implementation, which can lead to an updated implementation approach. During project implementation, evidence is key to ensuring that all activities of the intervention are contributing to a positive impact and/or can be adapted over the course of the intervention to maximize impact.

• <u>Change policies or programs:</u> This occurs when decision makers use findings from an evaluation or systematic review to alter their programming. For example, in 2011, the government of India's West Bengal State made an evidence-informed decision to amend the Groundwater Resources Act so the farmers in areas with the potential for groundwater development and with lower-powered pumps would no longer need to apply for costly permits to increase their access to water for crop irrigation. The <u>Breastfeeding</u>, <u>Antiretroviral</u>, and <u>Nutrition Study</u> was also adapted to reduce requirements of participants and alter antiretroviral regimens in response to negative side effects.

• <u>Improve the culture of evidence use:</u> This takes place in the form of decision makers' positive attitudinal changes towards monitoring and the use of evidence and evaluations. For example, the observation that a social protection program had limited nutritional impacts led to additional funding to evaluate whether the new nutrition-sensitive components are working.

Example of use over the life cycle of a program: Monitoring evidence indicates that there is substantial diversion of assets in the food aid program of a crisis response agency. Implementers know that citizen awareness campaigns (in which citizens are informed of their rights as beneficiaries) can reduce losses. As a result of the monitoring and research evidence, an awareness campaign is added to the intervention.

End of project transition

This entails basing next steps, project scaling or closure, on the evidence from monitoring and evaluation systems. Strong monitoring and evaluation ultimately produce new viewpoints, evidence, and data that can be used for future evidence-based decision-making, including the decision to scale or close an intervention. This can lead to a virtuous cycle in which new evidence is used for agenda setting and planning in the future.

- <u>Close a program:</u> This occurs when findings from an evaluation or review inform decisions to stop implementation or planned scale-up of a program or its components. For example, the absence of significant health improvements from cookstoves piloted in the Tumu region led Plan Ghana to halt the cookstoves program.
- <u>Scale up a program:</u> This occurs when evaluation findings contribute to the expansion of a program. One example is the World Bank citing findings from a 3ie-funded impact evaluation in its proposal for additional funding to improve social safety net programming in Malawi. This expansion would allow the program to cover all 28 districts of the country (from its original 19) to improve food security through cash transfers. In addition, the <u>Food and Nutrition Technical Assistance Project</u> was extended into phase II based on a variety of <u>reports</u> indicating the success of the original program.

<u>Example of use over the life cycle of a program:</u> Researchers leverage the monitoring data of the crisis response agency and determine that leakage reduced as a result of the citizen awareness campaign. They disseminate this information, and implementing agencies start integrating this into the design of their projects.



Step 1: Ask yourself the right questions

Key recommendations -

- Define your objective and learning questions around four pillars: the problem, the intervention, the comparison, and the outcome.
- Integrate those four pillars into your learning questions to guide your evidence search.
- Be ready to adapt your question as you go through your search for evidence.

When searching for evidence, it is important to think carefully about the question you are seeking to address. Defining your questions will help you to tailor your search for evidence and selection of data. What are you trying to understand or uncover? We recommend that you build your question through the following four components:

1. The problem and the population: You need to define the phenomenon about which you are seeking evidence. This includes both the problem and the population. What specific problem are you seeking to address? For whom are you seeking to address it?

Examples:

- Severe wasting in children aged six months to two years in rural Nigeria
- Goiters in the elderly in India
- Anemia in women of childbearing age in Latin America
- **2.** The intervention(s) being considered: You need to define the type of intervention from which you will be drawing data and evidence. What approaches within a specific sector or sectors are relevant here? Make sure that the interventions considered are relevant to you (i.e. options that you would consider implementing).

Examples:

- Infant and young child feeding education programs
- Behavior change communication about fortified salt
- Provision of iron ingots
- 3. The comparison or alternative: You need to define whether you will be comparing your evidence to another type of intervention, to the standard, or to the absence of intervention. What would have happened under different circumstances? Do you want to know: Is my intervention better than another intervention? Is my intervention better than what is currently being implemented? Or is my intervention better than nothing? A comparison, or counterfactual, is critical as a means of understanding what happens in the absence of an intervention or through the use of another intervention.

Examples:

- Infant and young child feeding education versus standard, ongoing communications
- Behavior change communication on fortified salt versus the provision of fortified salt
- Provision of iron ingots versus no intervention

4. The outcomes sought: You need to define the type of outcomes on which your evidence is focusing. Carefully consider which outcomes your intervention is likely to change and which of these you are interested in. This may involve considering your ToC, logical framework, results framework, or other documents that reflect the logical flow of the program. Note that in nutrition work there is a tendency to focus on stunting, wasting, and diet; however, it is not always plausible that these outcomes will change in response to the interventions implemented.

Examples:

- Stunting
- Iodine consumption
- Anemia

A research question should encapsulate the above scope, which is formulated in a specific and practical way. Research questions must be addressable, realistic, relevant, and linked directly to the problem that the evidence seeks to address. It should be grounded in your ToC. However, remember that these questions are not static. Expect to revise the question and its associated scope multiple times during a synthesis review. See the final section of this guide for more information on the research question and ToC.

Examples:

- Can the addition of an infant and young child feeding education program to a monthly baby-weighing program reduce the prevalence of severe wasting in children aged six months to two years in rural Nigeria?
- Is behavior change communication more effective than the provision of fortified salt in increasing iodine intake among the elderly in India?
- Does the provision of iron ingots to women of reproductive age in Latin America reduce the prevalence of anemia?

Step 2: Determine the scope of your evidence base

Key recommendations -

- Include a stakeholder analysis to define and/or identify what is already exists and who is working on or interested in the same evidence base as you.
- Use this defined evidence base to make your decision to search for more evidence or use what is already there.

Before jumping into the search for evidence, you may wish to establish the scope of your evidence base, or the boundaries of the body of evidence of interest for you. It is useful to identify all stakeholders or interest groups associated with the research question, including those conducting research; those making or implementing policy and the intermediaries between them; and individuals or groups who may affect, be affected, or perceive themselves to be affected by a decision, activity, or outcome of the project. This will help you understand potential sources of evidence as well as the groups with whom you will need to engage once you have gathered the evidence. You may identify certain individuals or groups to provide valuable input during the research and analysis. These stakeholders will also be of critical importance in disseminating your evidence.

Defining the scope of your search is about defining the boundaries of your work with evidence, but also being aware of your environment in order to work in an efficient manner. The evidence you require may have been recently covered by someone else, in which case it may be more effective and efficient to liaise with them rather than engaging in further research or simply complementing what someone else has done. During your scoping exercise, you may find resources that adequately respond to your research question without having to undertake a more intensive search. The context, evidence, and links framework in the table below is a useful tool for scoping as it provides a list of questions about each of the three parts of this nexus to help you to limit the breadth of your evidence base. The questions are not meant to be exhaustive and may not always be applicable depending on time and resource constraints.

The context, evidence and links framework¹

Context

- Who are the stakeholders relevant to the program/learning question?
 (eg. research institutions, policy makers, civil society organizations, community organizations, professional associations, etc.) Is there a demand for research and new ideas among policy makers?
- What are the sources of resistance to evidence-based policy making?
- What is the policy/program environment?
 - What are the policy making/program-making structures?
 - What are the policy making/program creating?
 - What is the relevant intervention framework?
 - What are the opportunities and timing for input?
- How do global-, national-, community- and household-level political, social, and economic structures and interests affect the room for maneuver of decision makers?
- Who shapes the aims and outputs of policies and programs?
- How do assumptions and prevailing narratives (which ones?) influence policy making and program making; to what extent are decisions routine, incremental, fundamental, or emergent, and who supports or resists change?

Evidence

- What is the current theory or prevailing narrative?
- Is there enough evidence for decision-making (research-, experience-, and statistics-based)?
 - How divergent is the evidence?
 - What type of evidence exists?
 - What type of evidence convinces decision makers?
 - How is evidence presented?
- Is the evidence relevant? Is it accurate, material, and applicable?
- How was the information gathered, and by whom?
- Are the evidence and the source perceived as credible and trustworthy by key stakeholders?
- Has any information or research been ignored, and if so, why?

¹ Start, D., Hovland, I., & Overseas Development Institute (London, E. (2004). Tools for policy impact: A handbook for researchers. Overseas Development Institute.

Links

- Who are the key stakeholders?
- Who are the experts?
- What links and networks exist between them?
- What roles do they play? Are there intermediaries between research and policy?
- Whose evidence and research do they communicate?
- Which individuals or institutions have significant power to influence policy and/or intended outcomes?
- Are these policy actors and networks legitimate? Do they have a constituency among the targeted population?

Step 3: Determine what type of evidence you are looking for

Key recommendations -

- Decide upon the sources and types of information you are going to use for the questions you are seeking to address
- Tailor the search and identify fit-for-purpose evidence

Different types of evidence are suitable when responding to different questions.

Descriptive evidence: provides contextual information about a location, issue, population, etc. They describe the situation.

Examples:

demographic data, maps, personal stories, clinic records

Evaluation evidence: leverages information to determine the effects of exposures or interventions. Generally, this involves a rigorous analytical step in which information is considered to identify outcomes or impacts

Examples:

impact evaluations, performance reviews

There are two main types of data:

Qualitative data: data in the form of words and experiences. They focus on direct testimonies of change, lessons learned, and points of views from beneficiaries or stakeholders (Simister et al. 2017).

Examples:

transcripts of focus group discussions, reports from field journals, audio record of interview, written testimony

Quantitative data: data in the form of numbers. They are divided into administrative data generated through monitoring an activity or output and sample data collected to assess changes resulting from a project or program.

Examples:

demographic data, impact measures, market price data, minimum expenditure basket calculations, performance indicators

This data can be presented through two different sources of information:

Primary sources: the original data source (i.e. raw data from the field). For an implementer, this can include the results of a survey, observation records, monitoring system records, transcripts, etc. Regular monitoring data, including participant-based surveys and vendor monitoring, can provide valuable information for the adaptive management of projects. However, an interesting form of a primary data source

for implementers is project evaluations. Evaluations are key instruments to assess systematically and objectively an ongoing or completed project, program, or policy, including its design, implementation, and results in relation to specific evaluation criteria. Evaluations aim to provide reliable and robust evidence from real-world experience to improve the effectiveness and long-term impact of programs. This information can inform the updated design of current projects and provide valuable insight into the design of future or follow-up projects. The implementer is then both a user of primary data sources (e.g. building on an existing evaluation of similar interventions) and the producer of primary data through monitoring and evaluation of their own interventions.

Example:

CARE conducted <u>48 interviews</u> with Syrian women to understand their experiences with food insecurity. These interviews represent a primary source of evidence.

Secondary Sources: build on existing data in a synthesized way. For the implementer, secondary data sources are a useful means of gathering data from multiple sources, comparing them, and synthesizing them in a format that will inform the specific needs of their own intervention. They can be presented in the form of systematic reviews and EGMs. Systematic reviews are the most rigorous form of primary data synthesis. They provide reliable and generalizable conclusions about intervention effectiveness. EGMs provide implementers with an overview of existing evidence on the effectiveness of a given intervention. However, secondary data sources also appear in other forms such as literature reviews, comparisons of evaluations and policy briefs. Once again, the implementer is a user of existing secondary data sources but can also produce secondary data by synthesizing existing evidence tailored to address questions related to their own intervention. The output of your evidence search is likely to be a form of secondary information.

Example:

This <u>systematic review</u> compares the effects of various training, innovation, and new technology interventions in Africa.

You do not have to choose one source over the other, but you should always match your sources with your questions and the scope of your research.

Making the decision

Before jumping into the search for data, decide on the sources and types of data that are most suitable in addressing your research questions. The tool below (developed by USAID) can be a good way to begin data mapping to ensure efficiency and effectiveness in your search for evidence. Starting from your questions, select production or use of existing evidence, sources of data, and types of data. These elements are not excludable and should be combined to better address your questions.

Figure 2: Evidence sources and matched questions Illustrative Example of Evidence Sources and matched questions Questions Sources or Methods • What is the status or context? Single Case Study Ethnographic Research Qualitative Case Studies Qualitative Evidence Synthesis **Descriptive Studies** Representative Sample Studies Cross-sectional Studies User Opinion ndigineous Knowledge • What should have happened? What did happen? • What can be improved? • What is the status and what has changed over time? • How did USAID contribute to the change? • How was program implemented and who did it reach? • Did the program consistently meet norms and standards? • Who benefited? • Were there unexpected outcomes? • Was there a measurable change in outcome? Quasi-Experimental • Did the intervention have a measurable effect on Randomized Control Trials those who participated that was not observed in a statistically matched control group? • Does the intervention work better than an alternative approach compared in a specific context? • Did the intervention achieve a measurable outcome that con be attributed to it? • Is the intervention more cost-effective than other approaches? Practice Guideline Systematic Review • Does the intervention work in most contexts? • Does doing the work better than that? Key: Qualitative Quantitative Mixed Spectrum of Rigor ightarrow Higher

Step 4: Conduct a search for evidence

Key recommendations -

- Conduct the search using both academic and gray literature sources
- Use platforms and websites providing relevant references for your sector or domain
- Carefully develop a search string to obtain the most relevant results

Once you have clearly defined your questions and the types of evidence you are looking for, you can conduct the search. When undertaking your search for evidence, keep in mind that you probably have limited time and resources. It might not be realistic to search for all evidence. Therefore, you need to focus your search on the most likely-to-be-relevant resources. Academic databases can be more technical and focus on academic literature. These include EBSCO Information Services and ScienceDirect.

Gray literature databases include information that is produced outside of the academic sphere but should not be perceived as less rigorous. The <u>World Bank</u>, <u>USAID</u>, and the <u>International Food Policy Research Institute</u> are all producers of high-quality, non-academic literature. 3ie's <u>Development Evidence Portal</u> combines gray and academic literature. There are over 4,000 individual publications available, including approximately 400 on food security and agriculture. Gray literature can also be found easily on implementing and funding partners' websites. Some of the main platforms for the food security and nutrition sector are listed in annexes.

When starting your search, we recommend that you:

- Identify platforms and databases that gather data and evidence on topics relevant to addressing your question. Although you may be more familiar with a broad search engine, like Google®, thematic platforms and databases may have a higher concentration of relevant information.
- If possible, identify some data and evidence meeting your needs that can be used as an example of relevant resources.
- List keywords from your scope. These key words can come from your research question, your scoping exercise, and the examples identified in Step 2.
- Develop a search string by combining your keywords with the AND, OR, NOT, quote, and parentheses functions available on some of these databases.
 - By putting AND between two words, you require that both words are found in the same source.

Example:

<u>Nutrition AND Children</u> will show you all the resources that include both the word nutrition and the word children

• By putting OR between two words, you require that only one of the words is found in the source.

Example:

<u>Nutrition OR Children</u> will show you all the resources that include either the word nutrition or the word children. This will include nutrition for populations other than children and studies on children that are not related to nutrition. As such, in this case, it may not be a well targeted search.

• By putting NOT between two words, you require that the first word is present and the second is absent from the results.

Example:

<u>Nutrition NOT Children</u> will show you all the resources that include the keyword *nutrition* but do not consider children.

• By putting parentheses around these combinations, you can combine more than one of these options. This is similar to the Order of Operations we learn in mathematics.

Example:

(Nutrition AND Children) NOT Breastfeeding will provide results about childhood nutrition that are unrelated to breastfeeding.

• By putting quotes around a word of phrase, you require that they appear together and in the exact form, ie not changes in tense, plural words must be plural, etc.

Example:

<u>"Childhood nutrition"</u> will show the limited results that have this exact phrase, but would not return articles that simply use phrases like *the nutrition of children*.

- Use your search string to search within the relevant platforms and databases.
- Use the relevant identified articles as resources for additional searches. This is called snowballing.
 - Forward citation search: look at the bibliography or references cited by your relevant study to see if those references could also be of interest for your question.
 - Backward citation search: do a search for resources citing your relevant resource to see if those references could also be of interest for your question.
 - Use the identified relevant articles to update your search string.
 - Explore the websites of funders or implementers referenced in your identified relevant articles.

If you can't find what you were looking for, engage with stakeholders in different sectors by searching, applying network connections, and directly consulting with actors based on your stakeholder mapping.



Step 5: Synthesize your evidence

Key recommendations

- Keep in mind that evidence is only of use once it is in the hands of the implementer and once this implementer or policy maker is considering evidence to inform decisions.
- Making evidence accessible is about both physical and technical access.
- Synthesize your data considering five key factors: technical quality, scope, context, consistency of findings on what works and what doesn't, and the cost of interventions. Base conclusions on synthesized findings

Although evidence is important, it is only practical once in the hands of the decision maker, often the implementer. If decision makers cannot access the evidence both physically and technically, they will not use it. Gathering evidence allows for physical access, but it is synthesis that allows for technical access.

The Cochrane Collaboration defines evidence synthesis as "a way of combining information from multiple studies that have investigated the same thing, to come to an overall understanding of what they found". Through this, we make sense of multiple sources of evidence and draw solid conclusions that can inform decision-making. Synthesizing your evidence to produce findings for informed decision-making means bringing together different sources and types of data and presenting them in a digestible manner. It tells us what is known and what is not known, what is working and what isn't.

When undertaking evidence synthesis, weigh the various sources based on their quality, applicability, and generalizability. To the extent possible, consider available cost evidence to compare interventions with similar effectiveness levels. If time and resources allow, consider collecting cost data as part of the MEL planning.²

One common mistake is focusing on the findings of your studies without considering their context, focus, or specificities. Another common pitfall is to assume that interventions without evidence are unsuccessful. However, the absence of evidence is not evidence of absence. Gaps in evidence do not mean that an intervention should not happen, but that monitoring will be of great value (Vogel 2012). A quality synthesis will then provide the following:

- A review of the technical quality of the studies constituting the body of evidence
- The size and scope of the body of evidence
- The context in which the body of evidence is set
- The consistency and narrative of the findings produced in the body of evidence on what works and what doesn't
- The consistency and narrative of the findings produced in the body of evidence on costs (when available)

²Ressources for incorporating cost evidence:

^{1.} https://cdn1.sph.harvard.edu/wp-content/uploads/sites/2447/2019/05/BCA-Guidelines-May-2019.pdf

^{2.} https://reliefweb.int/report/iraq/evidencing-value-money-cci-s-cash-and-legal-programmes-cash-consortium-iraq-november

Example in the food and nutrition sector: the 3ie Food Systems and Nutrition EGM In 2020, 3ie published its largest EGM, which included over 2,000 studies and represented a rich body of evidence of food systems and nutrition. EGMs allow users to explore the evidence of a given sector by providing a visual overview of existing and ongoing studies in terms of the types of programs evaluated and the outcomes measured. Implementers can use this pre-screened work to easily identify relevant studies and directly start considering synthesis steps. The EGM allowed us to identify some interesting insights about the food systems and nutrition sector:

- Several widely implemented interventions are not well researched, allowing for the potential for negative consequences and the inefficient use of funds.
- Women are traditionally major actors within food systems; however, we identified
 relatively few studies that examined interventions supporting women's decisionmaking or measured outcomes regarding women's empowerment.
- Larger interventions, which impact more people, are less commonly studied. Most evaluations took place at the local and subnational level, resulting in less evidence on national and transnational interventions.
- There is a strong focus on randomized trials. Mixed methods approaches and those considering cost evidence are severely underrepresented in the literature.

Step 6: Bring the evidence into your concrete context

Key recommendations

- Link the evidence to the concrete context of your intervention in coherence with the previous steps.
- Ensure that your evidence is informing, and is informed by, your intervention's ToC.
- Use the ToC as a living document that guides your project and evolves over its course based on evidence.

Providing evidence is not enough, and there are a series of elements that can incentivize, discourage, facilitate, or hinder evidence use. A major element to consider for better use of evidence is ensuring the link between the evidence provided and the concrete context of your intervention. This is ensured at the beginning of the process by thoughtfully defining the scope of the body of evidence and the research question, and it must then be reflected in the use of your findings.

One approach to ensure the relevance of findings and contribute to intervention design is to link them with your ToC. This transition from findings to concrete situations will ensure a good understanding of the positionality of the intervention in relation to the actors, issues, and objectives.

The ToC is a living tool that should be reviewed and adapted over the course of the project. The role of evidence in regards to it is then to "check and challenge assumptions, broaden the range of strategic options that may be relevant to the context, and strengthen the quality of the hypothesis for change to inform both the decision and implementation of a program or intervention" (Vogel 2012).

The evidence you found can be checked against, and contribute to, several aspects of your ToC. The figure below presents a standard ToC and the sections where evidence can be of use.

Steps	Problem	Target Group	Inputs	Activities	Outputs	Outcomes	Impact
ToC Question	What is the problem you are trying to solve?	Who are your beneficiaries?	What is your entry point to reaching your beneficiaries?	What steps are needed to bring about change?	What is the measurable effect of your intervention?	What are the wider benefits of your intervention?	What is the long-term impact of your intervention?
Evidence use	Context and issues Problems drivers	Population and beneficiaries characteristics	Trajectories, costs and time frames of change in different contexts for different issues and interventions	Examples of existing interventions and pilots with knowledge of their impact	Mapped cause effects from other interventions and interventions effectiveness	Impact for existing intervention and knowledge of what works and what doesn't	Impact of existing or comparable intervention and their long-term impact on beneficiaries
Other	Assumption: Context and issues, problem drivers and facilitators of change Stakeholders: Context and issues, stakeholder map and their role in intervention design and implementation						

A common way for implementers to update their ToC is to probe the link between inputs, activities, outputs, and outcomes and develop an evidence-based conclusion about why results are (not) achieved. These conclusions can inform adaptive management approaches and re-design. Building on an example from earlier, implementers may conduct education programs with smallholder farmers to teach them about a new agricultural technique. This activity might lead to an adequate number of farmers being trained, meaning that the outputs were as intended. However, if monitoring data find that the farmers do not then adopt the behaviour, there is evidence that the intended outcomes are not achieved. In the example from above, we propose that implementers may conduct interviews to determine why farmers do not adopt the behaviour and find that farmers are not willing to adopt new agricultural techniques without seeing the technique in action. Combining this quantitative and qualitative information, implementers might decide to introduce a new activity: demonstration plots.

By linking your findings to your ToC, you ensure their relevance and operationality. The ToC can both be a source of information that you gather through your research and the end product of your use of evidence. It can also be an engaging way to present your findings or accompany another synthesis product.

Example in the food and nutrition sector: informing intervention design to reduce childhood anemia in India

In 2018, 3ie published an <u>evaluation of the impact of a school feeding program</u> (Shastry et al. 2018) on meal quality and child health in Odisha. The authors found a significant and positive effect of the take-up of fortified meals. However, they found no positive impact on children's nutritional status, cognitive ability, school attendance, or reading and math test scores. The evaluation's findings informed the design of Evidence Action's pilot interventions in four states as part of its technical assistance to the Indian government under its school-based iron and folic acid supplementation program. As stated by Samantha Bastian, director of innovation at Evidence Action, "For us, I think, reading the paper was helpful. But being able to engage with [the lead researcher], maybe over eight or 10 calls to really get into the details...definitely was more useful."

Step 7: Present your findings

Key recommendations

- Question the credibility and accessibility of your findings.
- Decide how and why you want to present your findings, and in what format.

In order to support others in making evidence-informed decisions, as opposed to helping yourself make these decisions, you may need to present the synthesis of your findings. This can be illustrated by some questions such as, "How can evidence be transported from the research to the policy sphere?" or, "Why are some ideas that circulate in the research sphere picked up and acted on, while others are ignored and disappear?" (Start and Hovland 2004). Presenting your findings can encourage others to support the course of action identified as promising in your research. Some key elements must be addressed as you present evidence if you want to maximize the impact on decision-making:

- Credibility of the source: Am I using rigorous evidence from credible sources that are relevant in my specific context? We have seen in previous sections that all information is not evidence, and some sources are more recommended than others.
- Means of communication and layout: Am I using the right format to share evidence so it can be used to inform decision-making? Long and technical reports using scientific jargon can be a daunting task to prepare and may discourage some readers from digging into them. You need to find the right balance between details and synthesis.
- Language: Am I using the right language for my audience? This refers to the strict definition of languages, as well as the use of more or less technical language depending on the audience.
- Timing: Is it the right time for me to present my evidence? Are there upcoming decisions that can be informed by the findings? Gathering and producing is an effort and you want to make sure it is recognized and used; therefore, it is important to present it to decision makers when they most need it and are most prone to use it.

To ensure that all those criteria are met, the evidence producer or user can ask three questions (Start and Hovland 2004):

- 1. What is the story you are trying to tell? By knowing what you are talking about and what you want to do with this story, you will make sure you use the right language and means of communicating your findings.
- 2. Who are you targeting? By knowing who you are talking to, you will be able to ensure that you use the right language for them to engage with evidence, that you speak with them at the right time, and that you use a layout that is engaging for them.
- 3. How can evidence best be delivered? By knowing how you want to share information and knowledge, you will ensure that you use the appropriate sources of evidence according to your audience, as well as the most impactful means of communication.

Example in the food and nutrition sector: dissemination plan of the food security and nutrition EGM

All 3ie evidence products are disseminated according to a stakeholder, engagement and communication plan that allows us to maximize the impact and use of the evidence gathered through our research. In December 2020, 3ie published an EGM on the effects of food systems interventions on food security and nutrition outcomes in low- and middle-income countries. Although the final report is the central piece produced by 3ie, it is a technical piece, and it was important to ensure that it was physically and technically accessible for food sector stakeholders. The EGM then led to a diversity of products to facilitate dissemination and uptake of the evidence, including:

- The visual map of evidence on our Development Evidence Portal
- Policy briefs summarizing the key findings of the map
- Shared events and communication with some of our partners and donors
- Communication on social media
- <u>Organization of a YouTube® webinar accessible after the event</u>

These various ways of communicating our findings allow us to reach diverse stakeholders with variations in their knowledge of the sector, means of action, and technical backgrounds.

Step 8: Inform the re-desing, design and implementation of interventions

Key recommendations -

- Use a logical framework to systematically follow the steps of your established scope and/or ToC.
- Provide a set of indicators to assess the effectiveness and quality of your evidence.

Going back to the stages of the project/program cycle, we can observe that MEL is an important element to use design and evidence in an interactive process (Simister and Napier 2017):

- Identification: Evidence gathering and situation analysis can be of use to identify the challenges and issues to be addressed by the intervention.
- Design: Evidence gathering and the work of the design team will allow reflection on the design and best approaches to be used to address the identified issues. Evidence should support the development of a log frame and ToC.
- Plan: Evidence gathered will allow us to develop an implementation plan that will be most effective. This step will also allow us to define indicators that will be used to monitor the achievements of the intervention.
- Implementation: As implementation begins, close monitoring of its progress against the set of indicators of the log frame and ToC will further refine the project and evaluation.
- End or redesign: As the project comes to an end, the data gathered throughout the course of the intervention, as well as additional evaluation activities, will allow for an evaluation to assess whether it was successful. This evaluation will then allow us to provide evidence to support closing, replicating or redesigning the intervention.

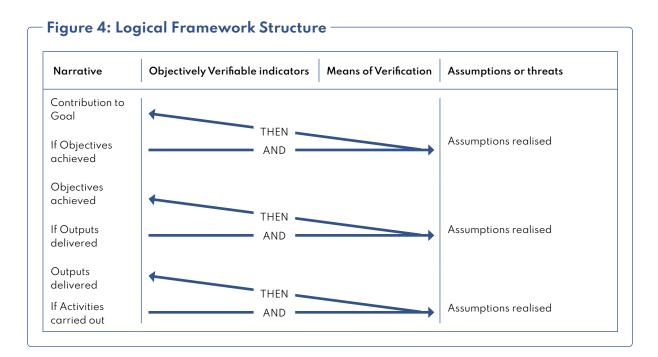
Understanding the role of MEL in the project cycle allows us to demonstrate the role of implementers, both as users and producers of evidence. Projects are continually producing data that can be turned into evidence, such as surveys, beneficiary interviews, observations, and records of proceedings. Therefore, implementers need to integrate MEL early at the start of the intervention to ensure that all necessary tools are in place during the program's life for the intervention to use and produce solid evidence. The ToC (presented in the previous section) and log frame are important resources in this effort to track and produce evidence from your intervention.

As explained in previous sections, MEL assists the implementer to be a user as well as a producer of evidence, both aspects of which contribute to greater intervention impact. In order to use evidence to make informed decisions, implementers need:

• Monitoring: Monitoring is the systematic and continuous collection and analysis of information about the progress of an intervention. It provides information about an intervention to all who require it, leading to more effective and efficient decision-making. The implementer becomes a producer of monitoring systems that will track processes, performance, results, impacts, management information, the situation, and so on. The implementer, therefore, also uses the results of those monitoring systems to make evidence-informed decisions.

• Evaluation: Evaluation is the systematic and objective assessment of an ongoing or completed project with regard to its design, implementation, and results. Once again, the implementer is a producer of evaluation by assessing their own intervention's impact, processes and/or performance. Implementers are also users of existing evaluations, building on their lessons to design and implement their own interventions.

To facilitate evidence production, the implementer needs to use appropriate tools. The logical framework, or log frame, is both a planning and monitoring tool supporting the management of the intervention. It is intrinsically linked to the ToC in the sense that it provides indicators and means of verification to the activities, outputs, outcomes, and longer-term impacts of the intervention (Garbutt and Simister 2017). As per its name, it provides a logical process to achieve the objective: if Activity A is realized under its set of assumptions, then Output A will be delivered, and if Output A is also achieved through its set of assumptions, then Outcome A will be delivered, and so on. By providing a set of indicators, the log frame is also an important tool for assessing the effectiveness of your intervention, as it will provide data on the achievement of each level of your ToC.



Example in the food and nutrition sector: log frame of a micronutrient mix intervention in India

The previously mentioned <u>evaluation of the impact of a school feeding program</u> on meal quality and child health in Odisha provides the log frame of the micronutrient mix intervention. In this log frame, we can find the main steps of the ToC and corresponding assumptions. The log frame then crosses the bridge from evidence use to evidence production, as it provides a set of indicators and sources of verification that the implementer will gather over the course of the project to then be used for impact evaluation.

	Objectives hierarchy	Indicators	Sources of vertification	Assumptions or threats
Impact (goal/ overall objective)	Improved child health and learning.	Hemoglobin test, height for age, weight for height, performance on cognitive, math and reading tests.	Household survey.	Children consume sufficient quantities of the MNM or IFA tablets in order to experience improved health. Other inputs needed to improve learning outcomes are present in schools. Adding the MNM to the meal or distributing IFA tablets does not take up valuable class time.
Outcome (project objective)	Children consume the meals and IFA tablets and attend classes (not just meals) more often.	Observations of meal consumption and school attendance, perceptions of meal quality from children and parents.	Meal observation survey, school attendance survey, household survey.	Children attend school often enough at baseline to increase nutrition. Meals are tasty and children eat sufficient quantities to increase intake of the micronutrients. IFA tablets do not have side effects.
	Improved nutritional content of school meals.	Vitamin A and Zinc content from food samples taken from school meals.	Lab tests of meal samples.	Children and parents value the higher quality meals and IFA tablets OR children have more energy to attend school due to meal improvements.
Outputs	High quality meals provided in school.	Take up of MNM mix, observation of meal quality.	Responses to MNM delivery enquiries, meal observation survey (survey of cook, headmaster and children).	Fuel and other ingredients needed to produce nutritious meals are available. School officials are motivated to improve the meals and able to perform any calculation (for example, how much MNM to add relative to number of children).
Inputs (activities)	Supplements (MNM, IFA tablets) provided to school officials. School staff trained in use.	Number of packets of MNM and IFA tablets received by school; number of school officials trained.	Reports from MNM delivery and trainings Reports from school officials on IFA program implementation (IFA survey).	District officials disseminated adequate instruction for school officials to distribute IFA tables.

Notes: MNM = micronutrient mix; IFA = iron and folic acid.

Conclusion

Evidence-informed decision-making is not a guarantee of success, but it is an effective and relatively efficient approach to improving program quality, increasing impact, and mitigating risk for a project manager to consider during intervention design. This eight-step guide demonstrates the importance of using evidence and determining how much of it relates to the operationalization of your project.

- Do you want to start a new project?
- Are you unaware whether one intervention will work better than another?
- Do you have limited funds but want to maximize impact?
- Do you want to adapt your project for it to be more effective and/or efficient?
- Do you want to learn from your project?

Evidence can be useful!

The most important concept in this guide is that evidence can only be useful once in the hands of implementers and/or decision makers who can use it for informed decision-making – and this leads us to our last set of recommendations:

- 1. Evidence is your business! Don't think that evidence is only the business of researchers and academics. Evidence requires the researcher and implementer to work together to use and produce quality evidence that will lead to quality implementation of interventions.
- 2. Evidence will always lead you somewhere! You are never wasting your time when looking for evidence to inform your intervention design. In the best-case scenario, you will find existing evidence from a comparable intervention, which will provide you with relevant findings to adapt your intervention. In the worst-case scenario, you will identify a gap in evidence that you will be able to fill through the production of evidence from your intervention.
- 3. Evidence is not for the few, but for the many! Don't keep findings to yourself. If evidence has informed your decision and intervention design, it might also inform others'. Evidence can also be the starting point to network development and synergies, which can bring positive results.

References

A

ACED 2021. The use of evidence for better decision-making by local governments: An analysis of the status of evidence production and its use in policymaking for food and nutrition security in Benin. Research report, Abomey-Calavi; Available at https://www.aced-benin.org/wp-content/uploads/2021/02/EIP_Report2020_English_version_web.pdf

В

Ball, L, 2017. Evidence isn't just for policy-makers. 23 November 2017. ODI website. Available at: https://odi.org/en/insights/evidence-isnt-just-for-policy-makers/

Bradt, DA, 2009. Evidence-based decision-making in humanitarian assistance. London: Humanitarian Practice Network at ODI.

Breckon, J, 2016. Using research evidence: a practice guide. London: Nesta. Available at: https://media.nesta.org.uk/documents/Using_Research_Evidence_for_Success_-_A_Practice_Guide.pdf [Accessed: 22 April 2021].

Buffardi, AL, Sharp, S, Hadley, S and Archer, RA, 2020. Measuring evidence-informed decision-making processes in low- and middle-income countries. ODI briefing note. Available at: https://odi.org/en/publications/measuring-evidence-informed-decision-making-processes-in-low-and-middle-income-countries/

C

Chalmers, I, 2005. If evidence-informed policy works in practice, does it matter if it doesn't work in theory? Evidence and Policy: a Journal of Research, Debate and Practice, 1, pp.227-242. Available at: doi: https://doi.org/10.1332/1744264053730806

CIPD, 2021. Evidence-based practice for effective decision-making factsheets. Available at: https://www.cipd.co.uk/knowledge/strategy/analytics/evidence-based-practice-factsheet [Accessed 28 April 2021].

Context matters: A framework to support knowledge into policy. (n.d.). Retrieved May 4, 2021, from http://cm.politicsandideas.org/homepage

Cornish, F, 2015. Evidence synthesis in international development: a critique of systematic reviews and a pragmatist alternative. Anthropology and Medicine, 22(3), pp.263–277. Available at: doi: https://doi.org/10.1080/13648470.2015.1077199

D

Deliv, C, Toomey, E and Putnam, E, 2019. Evidence synthesis – what is it and why do we need it? (Evidence Synthesis Ireland video, 13 September 2019). Available at: https://www.cochrane.org/news/evidence-synthesis-what-it-and-why-do-we-need-it [Accessed 5 May 2021].

DFID, 2009. Building the evidence to reduce poverty. London: DFID. Available at: https://www.oecd.org/development/evaluation/dcdndep/43183649.pdf

DFID, 2013. Assessing the Strength of Evidence: How to Note: A DFID practice paper. Available at: https://www.alnap.org/help-library/assessing-the-strength-of-evidence-how-to-note-a-dfid-practice-paper [Accessed 22 April 2021].

Doemeland, D and Trevino, J, 2014. Which World Bank reports are widely read? Washington, DC: The World Bank. Available at: doi: https://doi.org/10.1596/1813-9450-6851

Dubois, N and Gómez, A, 2018. Evidence in action: using and generating evidence about effectiveness in biodiversity programming USAID (Units 3 and 4). Washington, DC: USAID. Available at: https://biodiversitylinks.org/projects/completed-projects/measuring-impact/evidence-in-action



Evaluation Working Group, 2006. When Will We Ever Learn? Improving lives through impact evaluation. Washington, DC: Center for Global Development. Available at: https://www.cgdev.org/publication/when-will-we-ever-learn-improving-lives-through-impact-evaluation



Garbutt, A and Simister, N, 2017. The logical framework. INTRAC. Available at: https://www.intrac.org/wpcms/wp-content/uploads/2017/01/The-Logical-Framework.pdf

Garbutt, A, Napier, A, Scholz, V and Simister, N, 2017. Evaluation. INTRAC. Available at: https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Evaluation.pdf

Georgeou, N and Hawksley, C, 2020. Enhancing research impact in international development: a practical guide for practitioners and researchers. Research for Development Impact Network. Available at: https://rdinetwork.org.au/wp-content/uploads/2020/02/ERIID_V8_DIGITAL.pdf



Hagen-Zanker, J and Mallett, R, 2013. How to do a rigorous, evidence-focused literature review in international development: a guidance note. London: ODI.

Hewlett Foundation, 2018. Evidence-informed policymaking strategy. Global Development and Population Program, Hewlett Foundation. Available at: https://www.hewlett.org/wp-content/uploads/2018/04/EIP-Strategy-March-2018.pdf



IPC lobal Partners, 2019. Integrated Food Security Phase Classification Technical Manual version 3.0: Evidence and Standards for Better Food Security and Nutrition Decisions Rome: FAO. Available at: http://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/manual/IPC_Technical_Manual_3_Final.pdf



James, C, 2011. Theory of change review. Comic Relief. Available at: http://www.actknowledge.org/resources/documents/James_ToC.pdf

James, D and Simister, N, 2017. Quantitative analysis. INTRAC. Available at: https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Quantitative-analysis.pdf

Jones, H, 2012. Promoting evidence-based decision-making in development agencies. ODI background note. London: ODI. Available at: https://odi.org/en/publications/promoting-evidence-based-decision-making-in-development-agencies/

Jones, H, Jones, N, Shaxson, Land Walker, D, 2013. Knowledge, policy and power in international development: a practical framework for improving policy. ODI background note. London: ODI. Available at: https://cdn.odi.org/media/documents/8201.pdf



Lambert, H, 2006. Accounting for EBM: notions of evidence in medicine. Social Science and Medicine, 62(11), pp.2633-2645. Available at: doi: https://doi.org/10.1016/j.socscimed.2005.11.023

Langer, L and Stewart, R, 2014. What have we learned from the application of systematic review methodology in international development? A thematic overview. Journal of Development Effectiveness, 6, pp.236–248. Available at: doi: https://doi.org/10.1080/19439342.2014.919013

Langer, L, Tripney, J and Gough, D, 2016. The science of using science: researching the use of research evidence in decision-making. Technical report. London: EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London.

Lipsey, M and Noonan, E, 2009. Better evidence for a better world. 3ie Working Paper 2. New Delhi: 3ie. Available at: https://www.3ieimpact.org/evidence-hub/publications/working-papers/better-evidence-better-world [Accessed 30 April 2021].

M

Marschall, P, 2018. Evidence-oriented approaches in development cooperation: experiences, potential and key issues. Discussion Paper. Bonn: German Development Institute. Available at: doi: https://doi.org/10.23661/DP8.2018

McCallum Pardey, T, 2006. Evidence-based medicine: how to practice and teach EBM. Australasian Emergency Nursing Journal, 9, pp.187–188. Available at: doi: https://doi.org/10.1016/j.aenj.2006.09.004

Movsisyan, A, Dennis, J, Rehfuess, E, Grant, S and Montgomery, P, 2018. Rating the quality of a body of evidence on the effectiveness of health and social interventions: a systematic review and mapping of evidence domains. Research Synthesis Methods, 9(2), pp.224–242. Available at: https://doi.org/10.1002/jrsm.1290



Neale, EP and Tapsell, LC, 2019. Perspective: the evidence-based framework in nutrition and dietetics: implementation, challenges, and future directions. Advances in Nutrition, 10(1), pp.1-8. Available at: https://doi.org/10.1093/advances/nmyll3



Oliver, S, Gough, D and Copestake, J, 2017. Approaches to evidence synthesis in international development. London: CEDIL. Available at: https://www.cedilprogramme.org/wp-content/uploads/2018/01/Approaches-to-evidence-synthesis-in-international-development.pdf

Oxman, AD, Lavis, JN, Lewin, S and Fretheim, A, 2009. Support tools for evidence-informed health Policymaking (STP) 1: What is evidence-informed policymaking? Health Research Policy and Systems, 7(1), S1. Available at: https://doi.org/10.1186/1478-4505-7-S1-S1



Rao, K, 2021. Evidence impact: Seven ways that development decision makers use evidence. Il March 2021. 3ie: Blog. Available at: https://www.3ieimpact.org/blogs/evidence-impact-seven-ways-development-decision-makers-use-evidence

Rao, K and Thissen, P, 2021. Evidence impact: the ways evaluation findings shape real world outcomes. 28 January 2021. 3ie: Blog. Available at: https://www.3ieimpact.org/blogs/evidence-impact-ways-evaluation-findings-shape-real-world-outcomes [Accessed 26 April 2021].

S

Shastry, GK, Berry, J, Mukherjee, P, Mehta, S and Ruebeck, H, 2018. Improving midday meal delivery and encouraging micronutrient fortification among children in India. 3ie Impact Evaluation Report 77. New Delhi: 3ie. Available at: doi: https://doi.org/10.23846/OW3.IE77

Shaxson, L, 2005. Is your evidence robust enough? Questions for policy makers and practitioners. Evidence and Policy: A Journal of Research, Debate and Practice, 1(1), pp.101-112. Available at: doi: https://doi.org/10.1332/1744264052703177

Simister, N, 2017. Monitoring. INTRAC. Available at: https://www.intrac.org/wpcms/wpcontent/uploads/2017/01/Monitoring.pdf

Simister, N and James, D, 2017. Quantitative and qualitative methods. INTRAC. Available at: https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Quantitative-and-qualitative-methods.pdf

Simister, N, James, D and Lunin, L, 2017. Qualitative analysis. INTRAC. Available at: https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Qualitative-analysis.pdf

Simister, N and Napier, A, 2017. M&E functions. INTRAC. Available at: https://www.intrac.org/wpcms/wp-content/uploads/2017/01/ME-functions.pdf

Start, D and Hovland, I, 2004. Tools for policy impact: a handbook for researchers. London: ODI. Available at: https://cdn.odi.org/media/documents/194.pdf

Stewart, R, 2014. Changing the world one systematic review at a time: a new development methodology for making a difference. Development Southern Africa, 31(4), pp.581–590. Available at: doi: https://doi.org/10.1080/0376835X.2014.907537

Stewart, R, Langer, L and Erasmus, Y, 2019. An integrated model for increasing the use of evidence by decision-makers for improved development. Development Southern Africa, 36(5), pp.616–631. Available at: doi: https://doi.org/10.1080/0376835X.2018.1543579

Sutcliffe, S and Court, J, 2006. A toolkit for progressive policymakers in developing countries. London: ODI. Available at: https://cdn.odi.org/media/documents/190.pdf

U

USAID, n.d. 'DRAFT: USAID evidence framework: a conceptual framework for using evidence for programmatic and strategic decision-making at USAID' [PowerPoint presentation]. Available at: https://usaidlearninglab.org/sites/default/files/resource/files/508_draft_usaid_evidence_framework_version_2.0.pdf

USAID, 2016. Strengthening evidence-based development: five years of better evaluation practice at USAID 2011–2016. Washington, DC: USAID. Available at: https://www.usaid.gov/sites/default/files/documents/Strengthening_Evidence-Based_Development_Cover_Update_-_Five_Years_of_Better_Evaluation_Practice_at_USAID-compressed.pdf

USAID, 2018. Evidence in action: using and generating evidence about effectiveness in biodiversity programming. Washington, DC: USAID. Available at: https://biodiversitylinks.org/projects/completed-projects/measuring-impact/evidence-in-action [Accessed 4 May 2021].

V

Vogel, I, 2012. Review of the use of 'Theory of Change' in international development. London: DFID. Available at: https://www.theoryofchange.org/pdf/DFID_ToC_Review_VogelV7.pdf

W

Waddington, H, White, H, Snilstveit, B, Hombrados, JG, Vojtkova, M, Davies, P, Bhavsar, A, Eyers, J, Koehlmoos, TP, Petticrew, M, Valentine, JC and Tugwell, P, 2012. How to do a good systematic review of effects in international development: a tool kit. Journal of Development Effectiveness, 4(3), pp.359–387. Available at: doi: https://doi.org/10.1080/19439342.2012.71 1765

Annexes

Annex 1. Some key information from the guide

What is an "evidence-informed decision"?

The origins of the concept of "evidence-based decision" for policy making or intervention design is to be found in the health sector in the 1980s. Doctor's practice was based on tradition, preference but not on rigorous science. This was then considered as a risk because of a lack of consistency between practitioners and potential to harm patients (Cornish, 2015). Evidence-based medicine had three objectives:

- 1. Challenge the authority of doctor's idiosyncratic preferences
- 2. Make doctors more accountable to their practice
- 3. Improve patient care by using methods that work

Why does it matter for international development?

If we look at the health sector we can observe that the use of evidence has become the norm in policy and practice settings with systems for the production and integration of research into policy, guidelines and standards (Langer et al., 2016). This is not yet the case in the international development sector. This can be explained by a series of factors: the lack of incentives, the longer time needed to develop a system, the challenge of data gathering in situations of logistical limitations, the difficulty to conduct some types of studies, the difficulty to access evidence physically and technically. This relative absence of standardized practice also explains the emergence of actors such as the International Initiative for Impact Evaluation (3ie) and its commitment to promote evidence-informed, equitable, inclusive, and sustainable development through the generation and effective use of high-quality evidence.

In which context can evidence be used for more effective food security and nutrition interventions?

In April 2019, the Technical manual: evidence and standards for better food security and nutrition decisions was published, co-funded by the European Union and the UK Department for International Development. From a quick look at its list of references we can identify mentions of: guides on the use of monitoring indicators, list of monitoring and evaluation indicators, policy documents, practitioner guides, impact evaluations, policy reviews and evaluations, literature reviews.

This technical manual appears as an interesting illustration of the relevance of evidence in decision making and in shaping approaches in the food security and nutrition sector. But which evidence? And how to use it? We observe in the food and nutrition sector a large diversity and amount of information and data but often inaccurate. This is the illustration of a rising interest in the use of evidence in this section but is also bearing the risk of use of flawed information. Researchers have observed many nonscientific

opinions and anecdotal evidence readily available but not rigorous enough to be used as solid evidence for decision making (Neale & Tapsell, 2019). 3ie's recent work on food security observed a similarly disorganized and highly variable quality in literature.

Step 1: Asking yourself the right questions

In the field of FSN, studies often link their research questions to the broader, overarching goal of <u>Sustainable Development Goal 2</u>, to improve human health and reduce poverty. These often act as the high-level impact of theories of change that buttress the more specific questions that papers seek to answer with relevant evidence.

Within your scope, developing a PICOS (Population, Intervention, Counterfactual, Outcomes and Study Design) is critical to having a narrow enough focus to proceed with a search strategy. You can then use the PICOS as eligibility criteria that will allow you to differentiate the types of evidence you will use and those that fall outside you scope:

In the case of Prevalence of WLZ < -2 in children 6mo - 2 y in rural Nigeria, the following would apply:

- 1. **Population:** what groups and/or types of individuals are the target of the interventions you will study? Are they broader group such as men, women, boys, girls and non-binary folks, or specific sub-groups, including refugees, migrants or informal dwellers? Are there specific subsets of countries you are investigating, either by income or conflict level, geographic region or population size?
- 2. **Intervention:** what types of interventions are you looking at within your ecological framework?
- 3. Counterfactual: what is the "as is" population you will measure against?
- 4. Outcomes: what is the desired output of these interventions? For example, this could include improved food security, reduced child malnutrition, and improved agricultural outputs.
- 5. **Study design:** are you looking for experimental design studies only or are also inclusive of quasi-experimental and mixed methods studies as well?

Those PICOS directly relate to your research questions since, as you can now see, they have similarities. We then recommend building the PICOS and the research question together as they inform each other.

Step 2: What is the scope of your evidence base? The context, evidence and links framework

Context

- Who are the key policy actors (including policymakers)?
- Is there a demand for research and new ideas among policymakers?
- What are the sources of resistance to evidence-based policymaking?
- What is the policy/program environment?
 - What are the policymaking/program making structures?
 - What are the policymaking/program making?
 - What is the relevant intervention framework?
 - What are the opportunities and timing for input?
- How do global, national and community-level political, social and economic structures and interests affect the room for maneuver of decision makers?
- Who shapes the aims and outputs of policies and programs?
- How do assumptions and prevailing narratives (which ones?)
 influence policymaking and programs making; to what extent are
 decisions routine, incremental, fundamental, or emergent, and who
 supports or resists change?

Evidence

- What is the current theory or prevailing narrative?
- Is there enough evidence for decision-making (research-, experience-, and statistics-based)?
 - How divergent is the evidence?
 - What type of evidence exists?
 - What type of evidence convinces decision makers?
 - How is evidence presented?
- Is the evidence relevant? Is it accurate, material, and applicable?
- How was the information gathered, and by whom?
- Are the evidence and the source perceived as credible and trustworthy by key stakeholders?
- Has any information or research been ignored, and if so, why?

Links

- Who are the key stakeholders?
- Who are the experts?
- What links and networks exist between them?
- What roles do they play? Are they intermediaries between research and policy?
- Whose evidence and research do they communicate?
- Which individuals or institutions have significant power to influence policy?
- Are these policy actors and networks legitimate? Do they have a constituency among the poor?

After developing a simple PICOS, a synthesis protocol could be drafted (Hagen-Zanker and Mallet). Protocols should contain the following elements, as per different organizational protocol, including the Campbell and Cochrane review:

- A description and explanation of the research question
- A detailed list of the inclusion and exclusion criteria
- A list of the search strategy and strings
- The databases and websites to be searched,
- How the data will be used and presented
- A clear timeline for process and implementation

Step 3: What type of evidence are you actually looking for?

With a clear PICOS and protocol in hand, it is now time to actually sift through the often thousands of search hits that will result. How do we differentiate between evidence and rigorous evidence? More importantly, how do we present the rigorous primary and secondary sources as evidence?

According to the Department For International Development (DFID), strong evidence is of central importance in informing policy and programming decision making. Having robust research creates the evidence required to make judgements, enact policy and make informed decisions on how to spend financial resources and direct interest. Research can be categorized in different sections, including primary, secondary and theoretical:

- Primary empirical research: primary research observes phenomena first-hand by collecting, analyzing, and presenting raw data through direct observation.
- Secondary research: secondary publications review other studies by interrogating their data and findings, as well as utilize primary data in a quasi-experimental manner to construct an artificial counterfactual.
- Theoretical or conceptual research: these types of studies draw on previous secondary or primary research to construct new theories rather than utilizing empirical evidence.

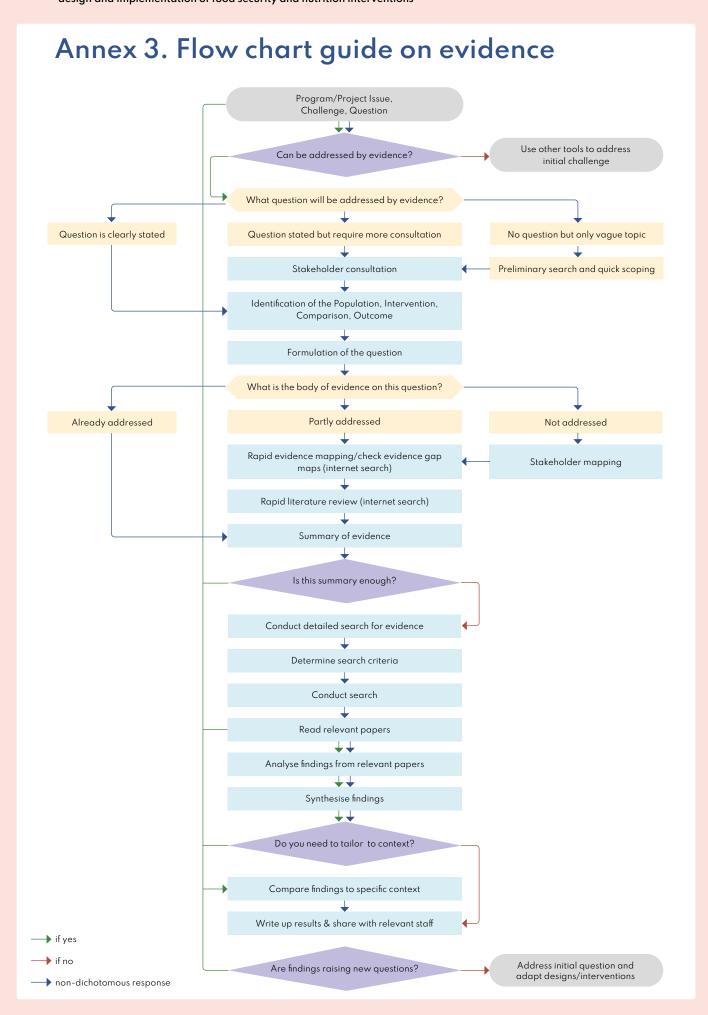
Step 4: Conduct a search for evidence

For example, 3ie and Innovative Methods and Metrics for Agriculture and Nutrition Actions (IMMANA) research group were commissioned by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in February 2020 to develop an Evidence Gap Map (EGM) of the effects of food systems interventions on food security and nutrition outcomes. The EGM conducted a systematic search strategy of academic databases in accordance with Hagen-Zanker and Mallet, grey literature sources and snowball searching.

Annex 2. Suggestions of platforms and databases in the food security and nutrition sector

	Resource	Description/Focus	Cost	URL
Bibliographic databases and library catalogs	CAB Global Health	Public health research and practice.	\$32/ day	https://www.cabi.org/ publishing-products/global- health/
	CAB Abstracts	World's applied life sciences literature.	\$32/ day	https://www.cabi.org/ publishing-products/global- health/
	Agricola	Publications and resources encompassing all aspects of agriculture and allied disciplines, including animal and veterinary sciences, entomology, plant sciences, forestry, aquaculture and fisheries, farming and farming systems, agricultural economics, extension and education, food and human nutrition, and earth and environmental sciences.	Free	https://agricola.nal.usda. gov/
	Africa-wide Information	Multidisciplinary index to research and publications by Africans and about Africa.	Price on request	https://www.ebsco. com/products/research- databases/africa-wide- information
	Campbell Library	Collection of Systematic reviews and Evidence and Gap maps.	Free	https://onlinelibrary.wiley. com/journal/18911803
Gray literature sources	Google Scholar	Simple way to broadly search for scholarly literature.	Free	https://scholar.google.com/
	UNICEF	Works in over 190 countries and territories to save children's lives, to defend their rights, and to help them fulfil their potential, from early childhood through adolescence.	Free	https://www.unicef.org/ what-we-do
	Save the Children	Respond to major emergencies, deliver innovative development programs, and ensure children's voices are heard through our campaigning to build a better future for and with children.	Free	https://www.savethechildren net/about-us/who-we-are
	PATH	Global team of innovators working to accelerate health equity so all people and communities can thrive.	Free	https://www.path.org/
	CRS	Assist impoverished and disadvantaged people overseas, working in the spirit of Catholic social teaching to promote the sacredness of human life and the dignity of the human person.	Free	https://www.crs.org/about
	JPAL	Global research center working to reduce poverty by ensuring that policy is informed by scientific evidence.	Free	https://www. povertyactionlab.org/about- j-pal

Resource	Description/Focus	Cost	URL
World Bank	Dedicated to offering researchers quick and easy access to the complete collection of World Bank formal publications and journals since the 1990s, as well as reports, working papers, and top data from the World Bank's World Development Indicators.	Price on request	https://elibrary.worldbank. org/about
USAID Development Evidence Clearinghouse	USAID repository of evaluations.	Free	https://dec.usaid.gov/dec/
3ie Development Evidence Portal	Comprehensive repository of rigorous evidence on what works in international development, consisting of rigorous studies and synthesis of studies conducted in low- and middle-income countries.	Free	https://development evidence.3ieimpact.org/
Oxfam Policy & Practice	Free access to 5000 publications including policy papers, research reports, technical briefs, case studies, books and journal articles.	Free	https://policy-practice.oxfam org/
Scaling up Nutrition Network	Working to achieve sustainable and equitable reductions in malnutrition and nutrition justice for all.	Free	https://scalingupnutrition.org about-sun/
IFPRI	Provides research-based policy solutions to sustainably reduce poverty and end hunger and malnutrition in developing countries.	Free	https://www.ifpri.org/
SPRING	Dedicated to strengthening global and country efforts to scale up high-impact nutrition practices and policies.	Free	https://www.spring-nutrition.org/about-us
SISN	Identify and address critical knowledge gaps in nutrition implementation and to use this to support more effective, large-scale, equity-oriented programs that deliver sustainable impact.	Free	https://www. implementnutrition.org/ about-sisn/
Nutrition International	Work to deliver the greatest nutrition impact at the lowest cost.	Free	https://www.nutritionintl.org about-us/
GAIN	Tackle the human suffering caused by malnutrition.	Free	https://www.gainhealth.org/ homepage
ENN-Network	Enhance the effectiveness of Nutrition policy and programming by improving knowledge, stimulating learning and building evidence.	Free	https://www.ennonline.net/
IMMANA grantee database	Aims to improve nutrition and health by strengthening tools, capacity and evidence in agriculture and food systems research.	Free	https://www. anh-academy.org/ immana#:~:text=The%20 Innovative%20 Methods%20and%20 Metrics,agriculture%20 and%20food%20 systems%20research.



Annex 4. Estimations of level of efforts (LOE) for evidence synthesis

Research steps	Estimated LOE (days)
Define question for research	1,75
Preliminary search	0,5
Stakeholder consultation	0,5
Identification of Problem, Intervention, Comparison, and Outcomes	0,5
Formulation of the question	0,25
2. Scoping (all based on rapid internet searches)	3
Stakeholder mapping	0,5
Evidence mapping	0,5
Literature review	1
Summary of existing evidence	1
3. Search for evidence	9,25
Definition of other search criteria and search sources	0,5
Implementation of search strategy	0,25
Results check	0,5
Selection of relevant evidence among results	0,5
Reading through selected evidence	5
Analysis of findings	2,5
5. Synthesis of evidence	2
Selection of relevant findings to address the question	0,5
Comparison of findings	1
Summary of findings and response to the question	0,5
6. Evidence in concrete context	4
Comparison of findings to context of intervention	0,5
Tailored summary of findings for specific intervention / programming	1
Write results and share with relevant staff	2,5
Total estimated days	20

