CONSERVATION LEARNING INITIATIVE

LEARN FROM EVIDENCE. IMPROVE CONSERVATION.

MAVA
FONDATION POUR LA NATURE

FOS
IMPROVING CONSERVATION

Conservation Evidence
Providing Evidence to Improve Practice

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Introduction

The conservation community needs smarter and more successful strategies to improve the impact of its work. One way of identifying those strategies and improving their effectiveness is through evidence-based learning.

The MAVA Foundation is ending its grant-making in 2022. MAVA's archives have been building up for nearly 30 years. They contain an accumulated treasure of conservation data, which form a rare opportunity for evidence-based conservation learning. As part of its legacy and its efforts to share its experiences, MAVA seeks to enhance the collective understanding of the conservation community about crucial conservation strategies.

Therefore, the foundation has challenged Foundations of Success and Conservation Evidence to combine the strengths of their approaches for evidence-based learning in this initiative. Foundations of Success promotes collecting and using evidence to learn and adapt. The organisation brings together practitioners to jointly formulate generic theories of change for widely used conservation actions. Conservation Evidence gathers evidence on conservation actions through synthesising documented evidence and sharing evidence through the Conservation Evidence database.

Together, we set out to develop and test a practical approach to evidence-based learning and to produce lessons learned around widely used conservation strategies. The approach encourages using different data sources to test critical assumptions about conservation strategies. It helps to deal with differences in the reliability and relevance of data and formulate insights based on the evidence. The core elements of evidence-based learning are: a well-defined learning topic corresponding to a conservation action, relevant learning questions that help to learn about the mechanics of the action, and explicit assumptions to test with evidence.

To date, the initiative has applied this approach to four conservation strategies. The conclusions should help fine-tune their implementation and increase conservation impact. With this starting point based on the best available evidence, we hope to spark discussion and invite practitioners and organisations to learn about essential conservation strategies. The work continues on the initiative website conservation-learning.org. If you are contemplating taking a similar approach for another strategy or would like to contribute with your evidence and insights, please contact us at info@conservation-learning.org

This report addresses all conservationists – practitioners, scientists, and funders alike – who want to explore the evidence-based learning approach or evidence for crucial conservation strategies.

Approach to evidence-based conservation learning

In this initiative, we use evidence to test critical assumptions in conservation practice. We have elaborated five practical steps for using assumptions and evidence to answer essential learning questions.

The approach we present here is a first attempt at formulating a method for evidence-based learning. We are continuously improving our process based on its application in practice and input from the conservation community.

By following this approach and optimising evidence use, it is possible to unveil crucial lessons about conservation strategies.

BACKGROUND

Already in the early 2000s, the conservation community identified the need to use evidence for decision-making to increase the effectiveness of conservation actions (Sutherland et al., 2004) (Pullin et al., 2004) (Pullin & Knight, 2001). Since then, the efforts to establish an evidence-based conservation practice have been twofold:

1. **Published evidence:** Approaches have emerged to collect and compile existing published evidence (Suter, 2016) and to make it accessible for conservation practitioners through online libraries and databases. Examples of these efforts are the CEEDER database of the Collaboration for Environmental Evidence (CEE) and Conservation Evidence at the University of Cambridge.

2. **Evidence from practice:** The conservation sector became more rigorous in project and programme design and management. The aim was to improve conservation practice through adaptive management (Salafsky et al., 2002) and standard practices (Conservation Measures Partnership, 2020) (Conservation Measures Partnership, 2007), (Conservation Measures Partnership, 2013), (Conservation Measures Partnership, 2004).

Building on these developments, the conservation community has recently developed concepts for defining and using evidence in practice (Salafsky & Margoluis, 2021), (Salafsky et al., 2019), (Dubois & Gómez, 2018) and proposed an approach to assess practical evidence for specific conservation actions (Salafsky et al., 2022).

The five-step approach we are presenting here heavily builds on these developments over the last 20 years.

FIVE STEPS FOR EVIDENCE-BASED LEARNING

The core elements of evidence-based learning are: a **well-defined learning topic** corresponding to a conservation action, **relevant learning questions** that help to learn about the mechanics of the action, and **explicit assumptions** to test with **evidence**. The five steps for evidence-based learning focus on and utilise these elements (Figure 1):

- Step 1: Define the learning topic
- Step 2: Develop learning questions and formulate assumptions for each
- Step 3: Collect evidence related to the assumptions
- Step 4: Assess the evidence to determine whether it supports the assumptions
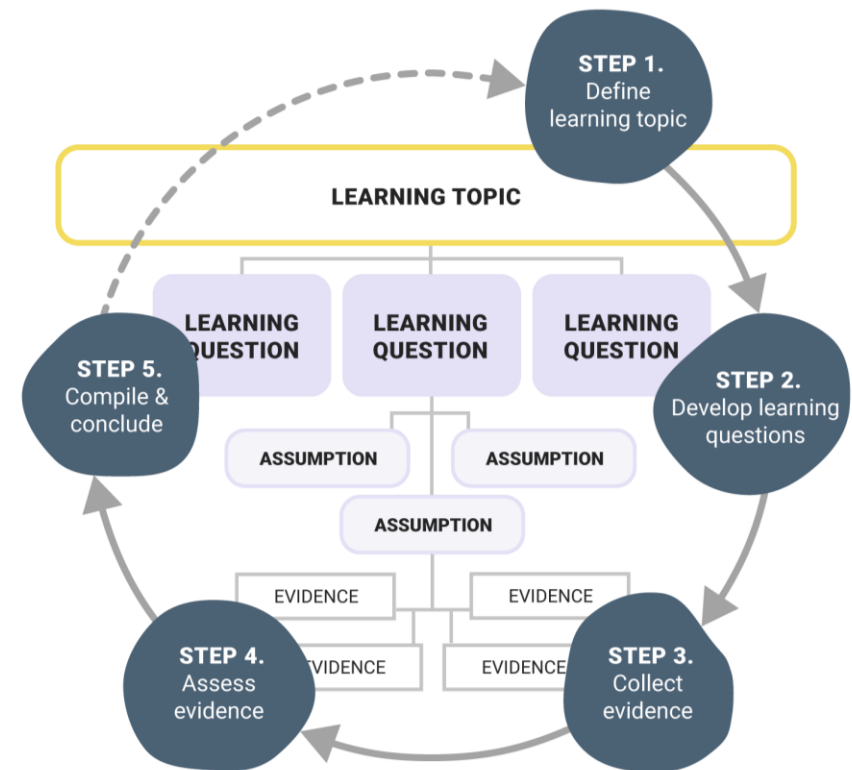- Step 5: Compile and conclude lessons for the learning topic

Figure 1: The approach to evidence-based learning in conservation. This is a first attempt at formulating the method and we are continuously improving our process.

DEFINITIONS

These definitions are based on and in line with the Open Standards for the Practice of Conservation by the Conservation Measures Partnership.

Theory of change: A series of causally linked assumptions about how a team thinks its actions will help it achieve intermediate results leading to target outcomes. A theory of change is often displayed in a strategy pathway diagram although it also can be expressed in text, mathematical notation, or other forms. A theory of change approach refers to both the process and the product of laying out these assumptions.

Learning question: An analytical need that can be addressed through analysis. Typically converted into one or more assumptions that can then be assessed.

Assumption: A general term used to describe what a program team believes to be true. Assumptions are related to particular learning questions and can be tested with evidence. For example, an assumed causal relationship between two or more factors in a theory of change.

Evidence: Relevant data, information, knowledge, and wisdom used to assess one or more assumptions related to a learning question. It can either support or refute a particular assumption. Evidence is obtained from different sources.

STEP 1 – DEFINE THE LEARNING TOPIC

Define the topic for learning, why learning about this topic is essential, and who is (likely) interested in the lessons learned. This step forms the context for the other steps of the process.

OUR APPROACH TO DEFINING THE LEARNING TOPIC

Our first challenge was to select a handful of learning topics from the MAVA portfolio of conservation grants. The portfolio spans roughly 1700 grants, addressing numerous conservation issues across different geographic regions and nearly 30 years.

Potential learning topics: We started with a quick scan of all 1700 grants. For each grant, we identified what main conservation actions it covered. We then cross-referenced these actions using a standard classification scheme of conservation actions (Salafsky et al., 2008) (Conservation Measures Partnership, 2016). This helped us list roughly 100 different conservation actions implemented through the MAVA portfolio.

Potential evidence: We then narrowed the list down to 14 conservation actions for which we expected evidence to be available. For this, we looked at the total number of grants that included the strategy and the total financial investment by MAVA in those grants. We assumed that the higher the total number of grants and the higher the total financial investment – the more likely it would be that we would find enough evidence.

Relevance and interest: Finally, we ranked each of the remaining 14 actions by evaluating how relevant the learning topic is to the broader conservation community. We combined this ranking with our interest in each of them as learning topics.

Through this process, we arrived at four selected learning topics:

1. **Building capacity** of key stakeholders and conservation organisations
2. Establishing strategic conservation **partnerships and alliances**
3. Providing **flexible conservation funding**
4. Basic conservation **research and monitoring**

STEP 2 – DEVELOP LEARNING QUESTIONS

Find focus in your learning topics by formulating relevant learning questions and associated assumptions that you can test with evidence. You can build the necessary framework for selecting learning questions by creating a theory of change that captures the pathway from conservation action to desired outcomes and impact. This step helps you to focus on desired learning outcomes.

OUR APPROACH TO DEVELOPING LEARNING QUESTIONS

For each of the four learning topics, we developed a **theory of change** (Figure 2). We used a results chain diagram (Margoluis et al., 2013) to explain how we assumed the conservation action would lead to specific results. Whenever possible, we started with a generic results chain from the Conservation Actions & Measures Library (CAML). We then refined this generic chain through various

rounds of reviewing and validation to finally arrive at a version that best represents the work implemented through MAVA-funded grants.

We used the results and the assumed causal relationships between results to tease out essential **learning questions**. We then formulated one or more **assumptions** for each learning question to test with evidence.
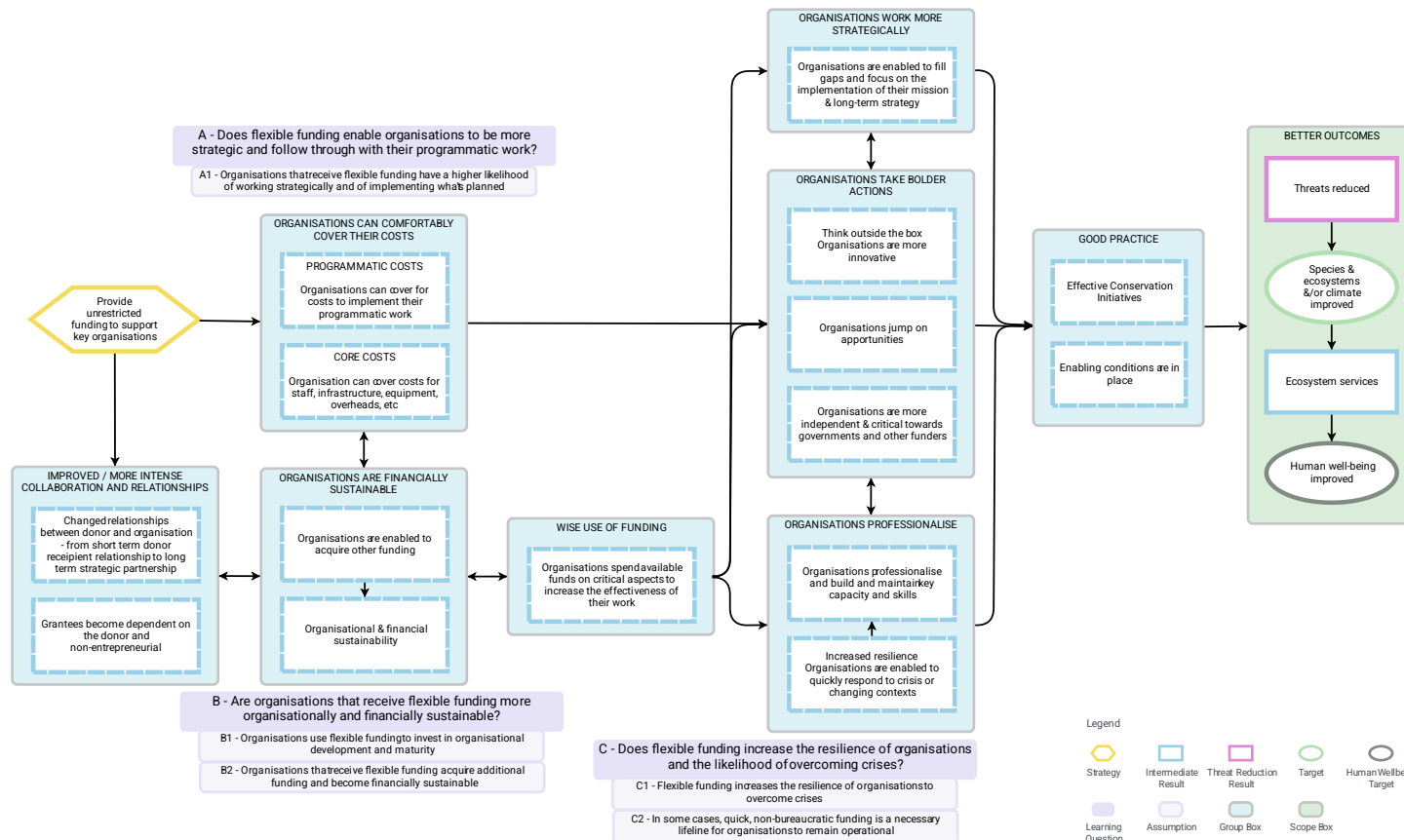

Figure 2: The theory of change for the learning topic Flexible funding. Note that the darker purple boxes contain the learning questions. The light purple boxes show the associated assumptions. For more details about this learning topic, see the chapter Flexible funding.

STEP 3 – COLLECT EVIDENCE

Once you have defined the learning questions and related assumptions, you can start collecting evidence. Evidence can come from different sources. Collecting evidence in an ordered and systematic way makes assessing it (Step 4) more manageable.

OUR APPROACH TO COLLECTING EVIDENCE

We collected all the relevant evidence for each assumption in the MAVA domain. We complemented this with evidence collected from outside the MAVA domain.

Looking beyond the MAVA domain helped us widen the evidence base and look for generic lessons learned. The amount of evidence we collected from outside the MAVA domain was limited by the available time, i.e. we did not do exhaustive reviews of all published evidence.

We provide a detailed description of the evidence base for all learning topics in the Learning section.

Sources inside the MAVA domain:

- Questionnaires to MAVA grantees
- Discussions and focus groups with the MAVA team
- MAVA grantee reports, proposals, and evaluations

Sources outside the MAVA domain:

- Conservation Evidence database through systematic searches
- Google and Google Scholar through exploratory searches
- Discussions with key researchers to highlight additional sources

The different types of evidence we found:

- Responses to questionnaires – both qualitative and quantitative
- Processed financial data
- Quotes and extracts from reports and articles
- Results and findings from research articles
- Conclusions from discussions with expert groups

STEP 4 – ASSESS EVIDENCE

When assessing evidence, two variables play a role: the degree to which evidence supports the assumption and the weight of the evidence. Both of these variables entail careful examination of each piece of evidence. The weighted pieces of evidence together then form the evidence base that you can use to test your assumption (Step 5).

It is essential to maintain consistency in your assessment of reliability and relevance. Group discussions, consultation with experts, and multiple iterations help ensure consistency.

OUR APPROACH TO ASSESSING EVIDENCE

To test our assumptions, we looked at every piece of evidence individually. We assessed the **degree to which it supports the assumption** and the **weight of the evidence** (Figure 3). To determine the weight, we looked at the **reliability** and **relevance** of the evidence (Salafsky et al., 2022) (Christie et al., 2022). In formulating this part of the approach, we relied heavily on the work of Salafsky et al., 2019.
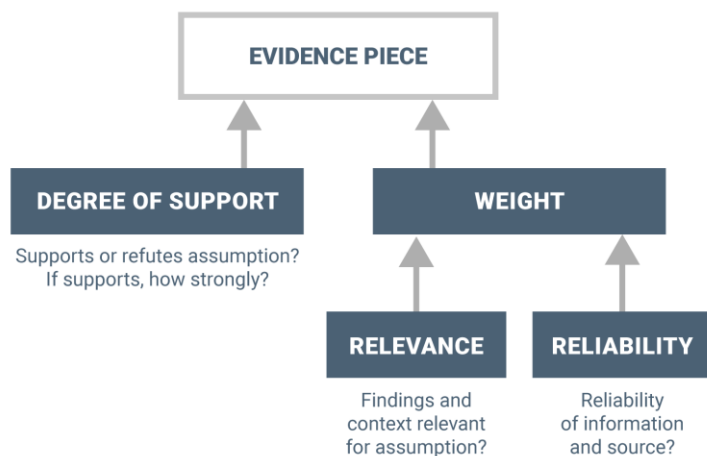

Figure 3: Each piece of evidence was assessed on degree of support for the assumption and on weight. Weight is a function of both relevance and reliability.

We had repeated discussions to maintain consistency in our assessments across evidence pieces and learning topics. By working through numerous examples, we established what features are typical for the most vs least reliable evidence pieces and the most vs least relevant ones. Where helpful, we wrote down general descriptors for each level of reliability and relevance to serve as reference material when assessing evidence.

Degree of support

We took a two-step approach to determine the degree of support.

First, we considered whether a piece of evidence indicates that the assumption is true (i.e. supports it), false (i.e. refutes it), or a mix of both (i.e. shows mixed support).

Second, if the piece of evidence supports the assumption, how strongly does it do so: does it show some support or strong support? On the negative side, in contrast, it was difficult to distinguish between strength of refutation in this way.

We therefore decided to judge the support of an individual piece of evidence to a particular assumption as either **Strong, Some, Mixed, or Refuting** (Figure 4). The degree of support can be illustrated by the colour and symbol of the evidence piece.
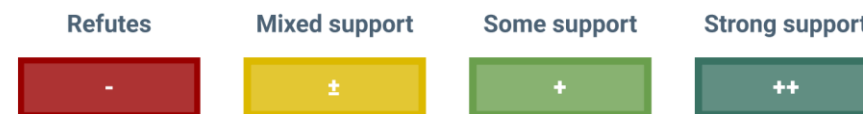

Figure 4: Degree of support

To illustrate this, consider the following assumption:

Trained people perform better than untrained people

A study that found improved performance following training would support this assumption. Furthermore, if the vast majority of trainees showed improved performance, support for the assumption would be strong. On the other hand, for a different study showing that only around half of the trainees improved, the support would be mixed. The assumption would be refuted by a study that found either that trained and untrained people perform equally well or that untrained people perform better.

The exact formulation of the assumption greatly influences the degree of support. For example, an alternative assumption to the one above could be *There is no difference in performance between trained and untrained people*. In this case, the assumption would be refuted by evidence for any difference between the two groups, regardless if it showed trained or untrained people performed better. However, a study showing that they perform equally well would support it.

Weight

To assess the weight of a piece of evidence, we considered its relevance and reliability.

Relevance refers to whether the evidence piece should be taken into account at all. Evidence pieces with low relevance to the assumption might be considered, but will have lower weight. Similarly, evidence pieces with low **reliability** also reduce the weight of evidence, regardless of its conclusion.

We used four weight categories: **Very high, High, Medium and Low.** The weight can be illustrated by the width of the evidence piece: the wider, the heavier (Figure 5).

Weight: How much emphasis should we place on this piece of evidence (regardless of its degree of support)?

Low weight	Medium weight	High weight	Very high weight

Figure 5: Weight

The table below shows how we combine relevance and reliability into weight.

Relevance	Reliability			
	Very high	High	Medium	Low
Very high	Very high weight	High	High	Medium
High	High	High	Medium	Medium
Medium	High	Medium	Medium	Low
Low	Medium	Medium	Low	Low

Relevance

We identified two components that together determine the relevance of a piece of evidence: **relevance of findings** and **relevance of context**.

Component 1: Relevance of findings

We first assessed how relevant the **findings** of the evidence piece were to the assumption that we were testing. We judged the relevance of the findings high if we could meaningfully connect the findings to the assumption. We considered the relevance lower if we needed to make an additional assumption.

To illustrate, consider the assumption '*Trainees apply their skills in their ongoing work*'. Imagine that a piece of evidence found that a group of trainees feels highly motivated to use their new skills following a training course, but without recording whether they also use the skills. We could use this evidence to assess the assumption, but if we do, we must *also assume* that this motivation translates into trainees using the skills. Therefore, we would consider this evidence less relevant than one that records the actual use of the skills.

We judged the relevance of findings as either **Very similar**, **Similar**, **Less similar**, or **Distant analogue**.

Component 2: Relevance of context

We then assessed how relevant the **context** of the evidence piece is for the assumption that we were testing.

To illustrate, consider the assumption '*Conservation practitioners use GIS skills to prioritise locations for new protected areas*'. If we found evidence related to training a particular target group in applying these specific skills, we would judge

the relevance higher than evidence associated with other capacity-building efforts.

We considered the relevance of the context or action as either **Very similar**, **Similar**, **Less similar**, or **Distant analogue**.

Combining relevance of findings and context

To judge the final relevance of an evidence piece, we combine the relevance of its findings with the relevance of its context using the following table:

Relevance of context	Relevance of result or finding			
	Very similar	Similar	Less similar	Distant analogue
Very similar	Very high relevance	High	Medium	Medium
Similar	High	Medium	Medium	Low
Less similar	Medium	Medium	Low	Low
Distant analogue	Medium	Low	Low	Irrelevant

We judged evidence to be irrelevant if the relevance of the finding and the context were both 'Distant analogue'. We excluded irrelevant evidence from further assessments.

Reliability

We defined two components that together determine the reliability of a piece of evidence: 1. rigour and appropriateness and 2. sample size. Both these components are related to the reliability of the information contained within the evidence. We did not consider the reliability of the source (Sutherland, 2022).

Component 1: Rigour and appropriateness

We assessed the rigour by which information in the evidence piece was gathered and analysed.

We used a range of questions, such as

- Was the choice of methods appropriate for gathering the information?
- Were potential biases acknowledged and accounted for where possible?
- Were there appropriate counterfactuals or controls?
- Were multiple, complementary methods or sources used to gather the information?

We judged rigour and appropriateness as either **High, Medium, Low or Nil**.

Component 2: Sample size

We then assessed the volume of each evidence piece by looking carefully at its sample size. We viewed sample size as an essential component of reliability because we were testing *general assumptions*, i.e. not constrained by a particular context such as geography or type of organisation. Because of this broad applicability, a large sample size increases reliability.

To illustrate, let us consider a report providing a synthesis of all 100 known scientific publications on a particular topic. This evidence piece (the synthesis report) contains a high sample size (all 100 publications). Compare this with an evaluation report of one training. This evidence piece (the report) contains a low sample size (1 out of many).

We did not use **thresholds** for sample size because we found that the spectrum was enormous and varied between assumptions. Conservation actions that are widely applied and have been applied for many years require a larger sample size than a conservation strategy that is relatively new and rarely applied.

We judged the sample size as either **High, Medium, Low or One.**

Reliability based on both components

Once we had assessments of rigour and appropriateness, and sample size, we used the following table to determine the reliability of each piece of evidence:

Sample size	Rigour and appropriateness			
	High	Medium	Low	None
High	Very high reliability	High	Medium	Medium
Medium	High	Medium	Medium	Low
Low	Medium	Medium	Low	Low
One	Medium	Low	Low	Low

STEP 5 – COMPILE AND CONCLUDE

Start by concluding to what extent the constituent assumptions of the learning question hold.

Once clear, interpret the results and formulate conclusions for the learning question. During this process, you will probably spot evidence gaps. Some of these might be important enough to consider in future learning initiatives.

OUR APPROACH TO COMPILING AND CONCLUDING

Compiling the evidence base

To understand the overall evidence for a particular assumption, we combined the individual pieces of evidence and displayed them in a summary Ziggurat plot.

A Ziggurat (or skyscraper) plot (Figure 6) displays evidence pieces as horizontal blocks, organised in categories of the degree of support for the assumption (in line with the visualisation of degree of support and the weight as described in Step 4). The purpose of the plot is to show the balance of available evidence that supports or refutes the assumption.

The width of each block of evidence represents its weight. The maximum potential weight of a single block is one (very high weight), the minimum is 0.25 (low weight). The total weight of each category is calculated by adding up the weight of all its blocks.

Drawing conclusions

To conclude on each assumption, we inspected the Ziggurat plots to see whether the balance of the evidence supported, refuted or showed mixed support for the assumption. A detailed consideration of all evidence pieces also allowed us to highlight important themes and discussion points.
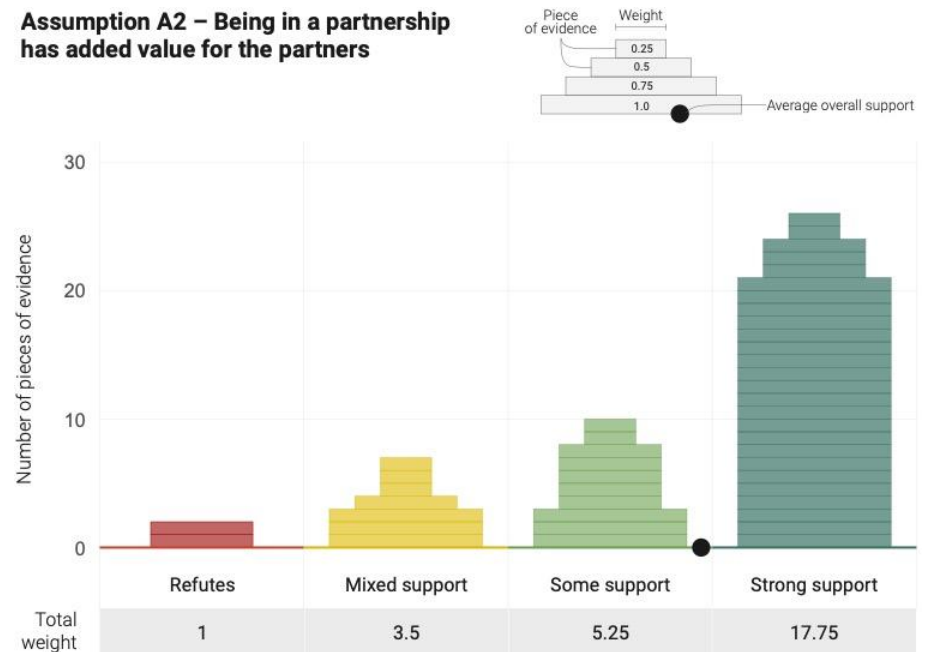

Figure 6: Example Ziggurat plot for the assumption 'Being in a partnership has added value for the partners'. Each piece of evidence is a horizontal block whose width represents its weight. The maximum potential weight of a single block is one. The number below each evidence block pile shows that pile's total weight. To derive an average degree of support, we defined support categories as consecutive integers (refutes=1, mixed=2, weak=3, strong=4) and calculated the weighted mean (filled black point). You can imagine the filled black point as the location on a balance beam where you would need to place the fulcrum to balance both sides. The weighted mean was used as a guide for interpreting the overall degree of support, and not as a definitive answer. This is because where there is very variable or strongly bimodal support, the weighted mean may be a poor representation of the expected support for an assumption.
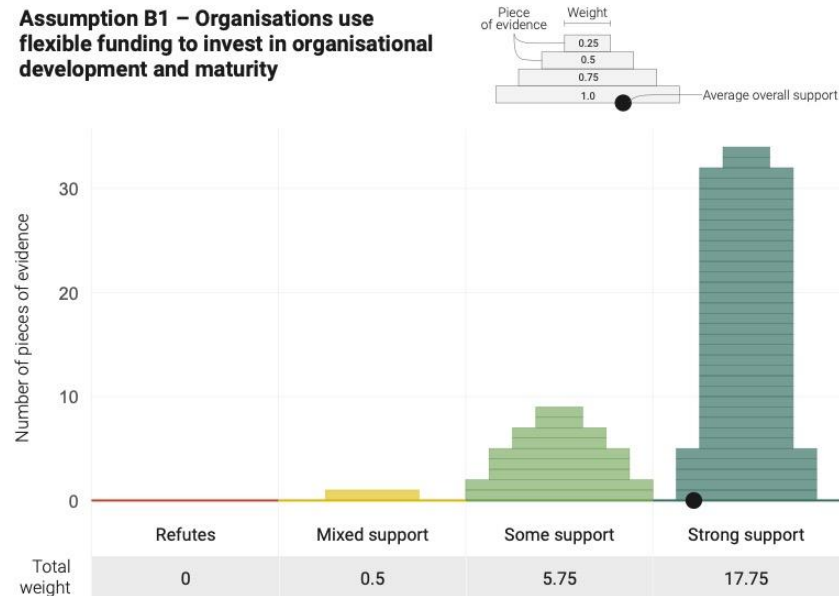
Figure 7: Example from the learning topic Flexible funding. The combined evidence is showing overall strong support for the assumption (B1: Organisations use flexible funding to invest in organisational development and maturity).
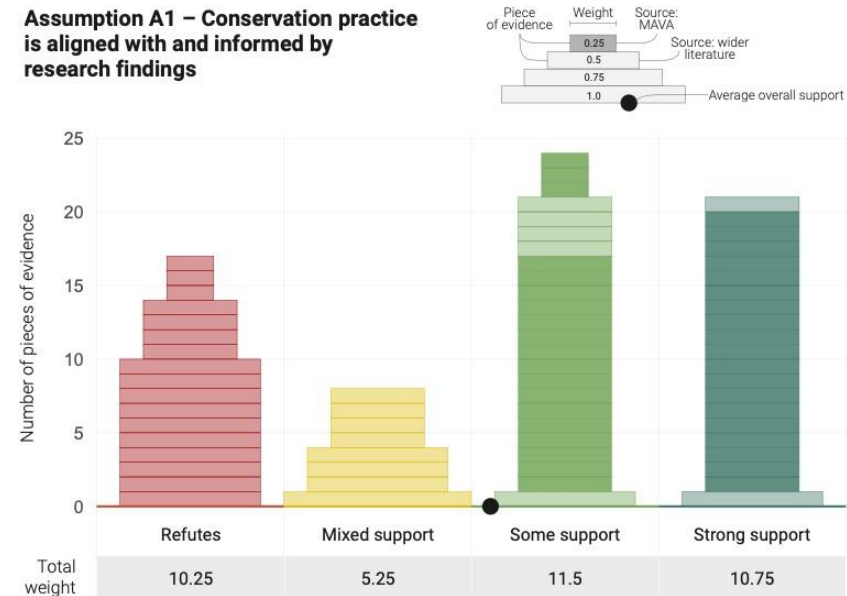

Figure 8: Example from the learning topic Research and monitoring. The combined evidence is showing overall mixed support for the assumption (A1: Conservation practice is aligned with and informed by research findings). However, the evidence from MAVA (darker blocks) shows overwhelming support, while the evidence from other sources (lighter blocks) tends to refute or be mixed.

In the example above (Figure 7), 34 out of 44 evidence pieces strongly support the assumption that organisations use flexible funding to invest in organisational development and maturity. Almost all combined weight of the evidence suggests either strong or some support for the assumption. So, in summary, the overall support for the assumption is strong.

When the balance of evidence did not support or refute the assumption, we considered whether the two different sources of evidence (i.e. evidence from inside and outside the MAVA realm) presented different conclusions. In some cases, support for the assumption differed between evidence from MAVA's grant portfolio and evidence from the broader literature. By highlighting key themes, we hoped to explain the reasons for these differences.

In this other example above (Figure 8), the combined evidence shows mixed support for the assumption that conservation practice is aligned and informed by research findings. In this case, the evidence both supports and refutes the assumption, though the weight of the supporting side is stronger. However, there is a significant difference between evidence from the MAVA domain and the broader literature. All MAVA-related evidence shows some or strong support for the assumption. The vast majority of other evidence refutes the assumption or suggests mixed support. In summary, the overall support for the assumption is mixed.

Finally, we combined the conclusions and learnings for each assumption to answer the related learning question. Where possible, we described existing evidence gaps to consider in further learning efforts.

The learning

The Conservation Learning Initiative has focused on four key conservation strategies as learning topics. This chapter introduces the background of each learning topic along with its learning questions and assumptions, provides an overview of the main findings, and presents detailed findings as well as a discussion of the evidence and links to the sources.

ABOUT THE LEARNING TOPICS

This initiative has focused on four key conservation strategies as learning topics:

- capacity-building to improve conservation practice leading to better conservation results,
- establishing partnerships and alliances to increase the impact of conservation initiatives,
- offering flexible funding to conservation organizations to help them work more strategically and implement more effective conservation actions, and
- research and monitoring to inform conservation practice.

In this chapter, each learning topic is presented as follows:

- a summary of the key findings,
- a quick overview of the learning topic (as outlined in Step 1 – Define learning topic),
- the learning questions and assumptions addressed along with the theory of change behind the implementation of the conservation strategy (as outlined in Step 2 – Develop learning questions),
- a table summarizing the findings based on evidence for each of the assumptions, and
- the details for each of the assumptions considered, including the evidence base found and how it has been assessed to support or refute the assumption (as outlined in Step 3 – Collect evidence, Step 4 – Assess evidence, and Step 5 – Compile & conclude).

The text includes references linking to the learning topic's evidence capture sheet, for further details on the evidence and sources.

CAPACITY-BUILDING

Key findings:

Training often leads to improved practice, yet the success of individual training interventions can vary hugely. There are significant opportunities to improve training by learning from decades of training research. (see learning question A)

Training success depends on trainee characteristics, the working environment, and the design and implementation of training interventions. (see learning question B)

Carrying out a training needs analysis may offer an opportunity to improve the effectiveness of training interventions. (see learning question C)

We can't conclude whether trained staff will likely stay with their organisation. Staff turnover depends on working conditions and training types. Improved monitoring of post-training effects could be very informative in the future. (see learning question D)

OVERVIEW OF THE LEARNING TOPIC

Many conservation efforts identify a need to build capacity in order to improve 'practice' in various ways. The purpose can be for conservationists to implement their strategies more effectively or for other actors to change their practices to be less harmful and decrease threats to biodiversity. Using capacity-building to achieve these ends relies on two key assumptions:

1. People learn skills and apply them in practice
2. Trained people implement better practices

While testing these two crucial assumptions with evidence, we were also interested in some contextual aspects. Using the wealth of information about the conservation sector's capacity-building efforts, we wanted to understand the skill deficits conservation actors typically identify in stakeholder groups. Another question was what the patterns are for trained people to stay within the work environment (e.g. conservation) and bring their new skills to practical use.

LEARNING QUESTIONS AND ASSUMPTIONS

Generally, the idea behind capacity-building is that once stakeholders are able to change their practices, they will do so. This strategy often involves other actions, such as positive or negative incentives to change behaviour or initially increasing stakeholder awareness of a problem. In this learning topic, we are focusing on the capacity-building itself.

Most capacity-building strategies assume that the conditions for successful training are in place. After a sufficient number of trainees are trained and recognise the value of the provided skills, an adequate number of people will apply the skills, if certain conditions are met.

Following that, practices improve. Conservation actors implement better strategies and actions. Other stakeholders use better techniques that are less harmful to biodiversity.

In this learning topic, we have been trying to get a grip on some of the critical aspects that make capacity-building strategies fly or fail (Figure 9):

1. Whether trained people actually **implement better strategies and practices** (see learning question A)
2. Whether **trainees apply their skills in their work** (see learning question B)
3. Which **skill deficits** conservation organisations typically identify (see learning question C)
4. Whether **trained people stay with their organisation** so they can bring their skills to good use in the relevant practices and actions (see learning question D)
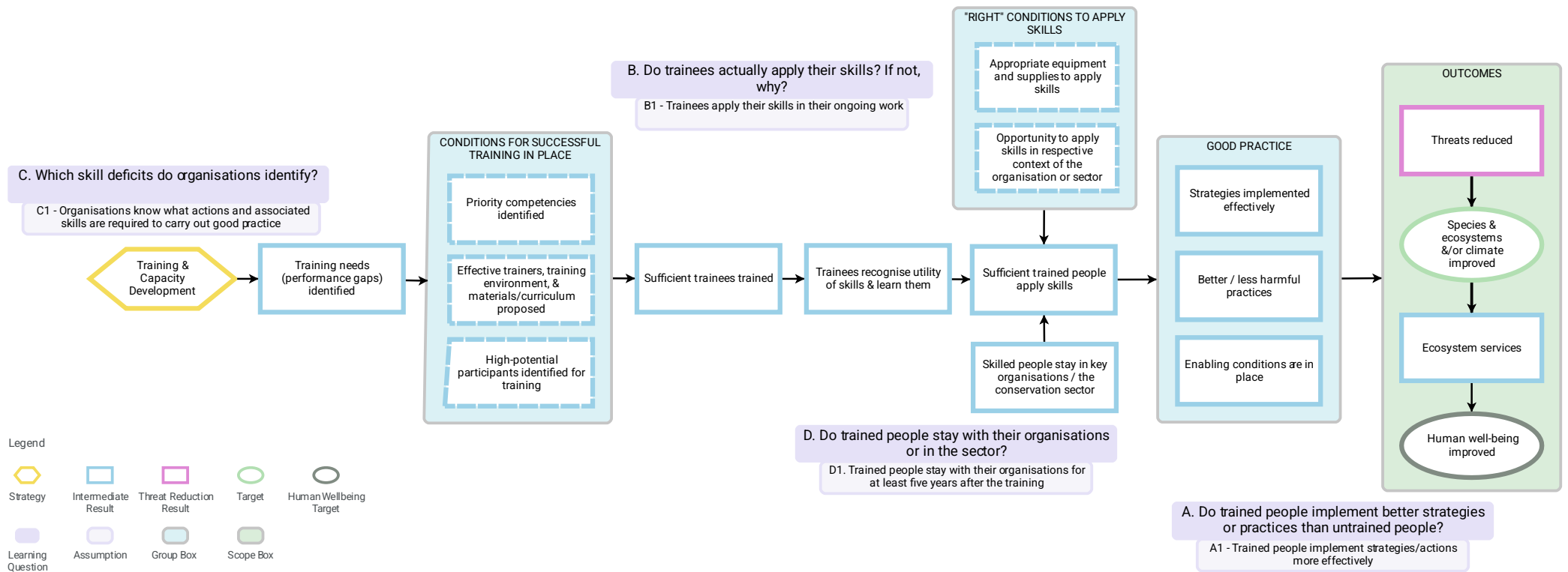
Figure 9: The theory of change, learning questions, and assumptions for the learning topic Capacity-building. Note that the darker purple boxes contain the learning questions. The light purple boxes show the associated assumptions. This theory of change with learning questions and assumptions has been developed using Miradi Share. You can access this theory of change directly on the Conservation Actions and Measures Library (CAML).

EVIDENCE AND FINDINGS

The figure below shows an overview of the main findings. Note that these summary ratings do not represent uncertainty and level of confidence in the evidence appropriately. For the full picture, please review the evidence base and assessment for each assumption.

LEARNING QUESTION / ASSUMPTION   FINDINGS

Do trained people implement better strategies or practices than untrained people?

Trained people implement strategies/actions more effectively   ( ) ( ) **+** ( )

Do trainees actually apply their skills? If not, why?

Trainees apply their skills in their ongoing work   ( ) ( ) **+** **++**

Which skill deficits do organisations identify?

(Assessment of types of capacity-building needs that organisations identified and carried out)

Do trained people stay with their organisations or in the sector?

Trained people stay with their organisations for at least five years after the training   ( ) **±** ( ) ( )

- refuted   ± mixed support   + some support   ++ strong support

Learning question A: Do trained people implement better strategies or practices than untrained people?

Training often leads to improved practice, yet the success of individual training interventions can vary hugely[68] *. There are significant opportunities to improve training by learning from decades of training research.

Assumption A1: Trained people implement strategies/actions more effectively

The evidence suggests that practices improve when training people. However, outcomes of individual training interventions can vary hugely, ranging from complete success to utter failure. There are enormous opportunities for the conservation sector to improve the effectiveness of training interventions by learning from decades of training research conducted in other sectors (Ford *et al.*, 2018) (Salas *et al.*, 2012). (Figure 10, Figure 11) Review the evidence used for this assumption in the evidence capture sheet.

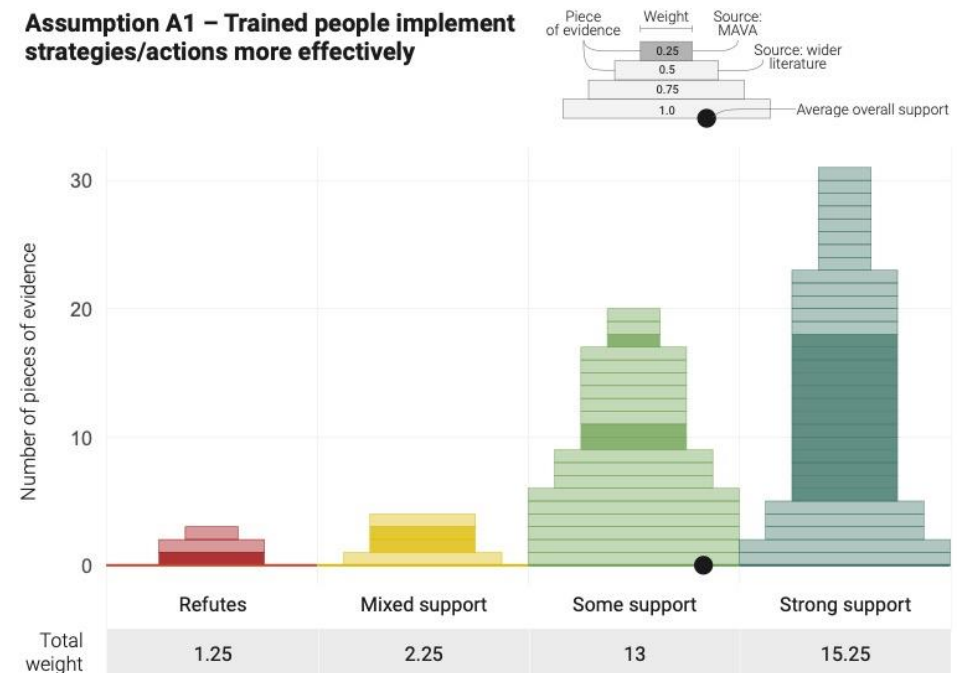Figure 10: Combined evidence from MAVA grants and wider literature.

Figure 11: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

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* The number in superscript represents an evidence piece that was used to test the assumption. Each number links to the corresponding row in the evidence capture sheet.

Evidence base

To assess this assumption, we considered 58 pieces of evidence obtained from different sources.

An in-depth search of the MAVA grants database provided 11 pieces of evidence from eight sources that we could use to test this assumption. An initial review highlighted 78 grants relevant to the topic of capacity-building. Documentation – including progress reports, final reports, and technical reports – was searched in detail for indications that linked training with trainee performance.

A targeted questionnaire sent to 40 MAVA grantees provided eight answers as evidence pieces. The questionnaire contained ten questions, one of which was:

What difference do you see in the implementation of actions before and after the capacity-building activity?

A systematic search of the Conservation Evidence database provided 21 pieces of evidence from 21 sources that we could use to test this assumption. We found these sources using searches for the keywords train, teach, learn, and capacity, supplemented with a search for actions relating to education and awareness. This search returned 142 conservation actions and over 1,000 studies. We prioritised those actions most likely to contain relevant studies, leaving us with 40 actions and 91 studies to search.

Exploratory searches of the wider literature found 18 pieces of evidence from 16 sources. There is extensive literature covering the outcomes of training interventions. We, therefore, made use of high-level, authoritative reviews and meta-analyses to guide our choice of sources in an attempt to provide a balanced view of the state of current knowledge.

Evidence assessment

On balance, evidence from the MAVA grants database, questionnaires, and wider literature provides some to strong support for this assumption (Figure 10, Figure 11).

Better practice through training

We found examples where training led to more effective action at various levels, from individuals to teams to whole organisations.

Individuals showed improvements in leadership, management, and practical skills (often to support livelihoods). In some cases, there was a shift towards more conservation-oriented behaviours.

> *"This new and confident behaviour while still being practised, embedded, and transferred is sparking cultural change in organisations and resulting in numerous cases of sector change through modelling a more inclusive leadership style and sharing learning" (MAVA, 2020)*

Team training positively affected many outcomes, including team performance, decision-making, and error reduction. In some cases, team training was only partially effective[52].

There were positive outcomes at the organisational level for skills relating to management and administration, communications, outreach, advocacy, and developing new tools and platforms.

> *"As result of close cooperation and Saiga ranger network's outstanding skills in leadership and staff management, detection and arrest of illegal hunting has been upgraded" (MAVA-G3, 2014)*

Limitations in the effectiveness of training

While evidence broadly supported the assumption, there was one case where training was considered inadequate[9], in this case to ensure the quality of artisanal products. In another case, the role of coaching was called into question when participants' performance on tasks did not improve[50].

One piece of evidence from the MAVA questionnaire refuted the assumption[20]. It suggests that training and capacity-building may lead only to surface-level changes, which do not carry through to action.

> *"There are differences in the language you use to communicate with people after years of different capacity-building activities. Everybody knows the situation, the problematics, and the solutions. This, however, is not reflected in more proactive and effective action." (MAVA, 2022)*

Two sources from the Conservation Evidence database reported that distributing leaflets and information signs was ineffective[29, 33] in encouraging people to behave more responsibly towards wildlife. While these evidence pieces refuted the assumption, they were judged to have low relevance for the assumption due to the passive methods of information sharing they used.

Assessing effectiveness of training

Evidence from the MAVA grants database rarely involved a formal assessment of the impact of training interventions. More broadly, evidence from the conservation sector often lacked detail on the training methods used and justifications for the choice of methods and measures of success (with some notable exceptions[56]).

In contrast, the wider training literature was characterised by numerous large-scale, rigorous investigations of the effectiveness of various training interventions in different fields. Tremendous progress has been made in understanding how to design and deliver training interventions effectively and accurately measure their impact.

Learning question B: Do trainees actually apply their skills? If not, why?

Training success depends on trainee characteristics, the working environment, and the design and implementation of training interventions. A training needs analysis may reveal opportunities to improve the effectiveness of training interventions.

Assumption B1: Trainees apply their skills in their ongoing work

The evidence suggests that trainees often apply learned skills in their ongoing work. However, we found several cases where skills were not used or were used by only a few trainees. Findings from decades of training research suggest that training can work, but that trainee characteristics, work environment, and the design and implementation of training interventions will all impact whether trainees apply their skills. (Figure 12, Figure 13)

Review the evidence used for this assumption in the evidence capture sheet.

Figure 12: Combined evidence from MAVA grants and wider literature.
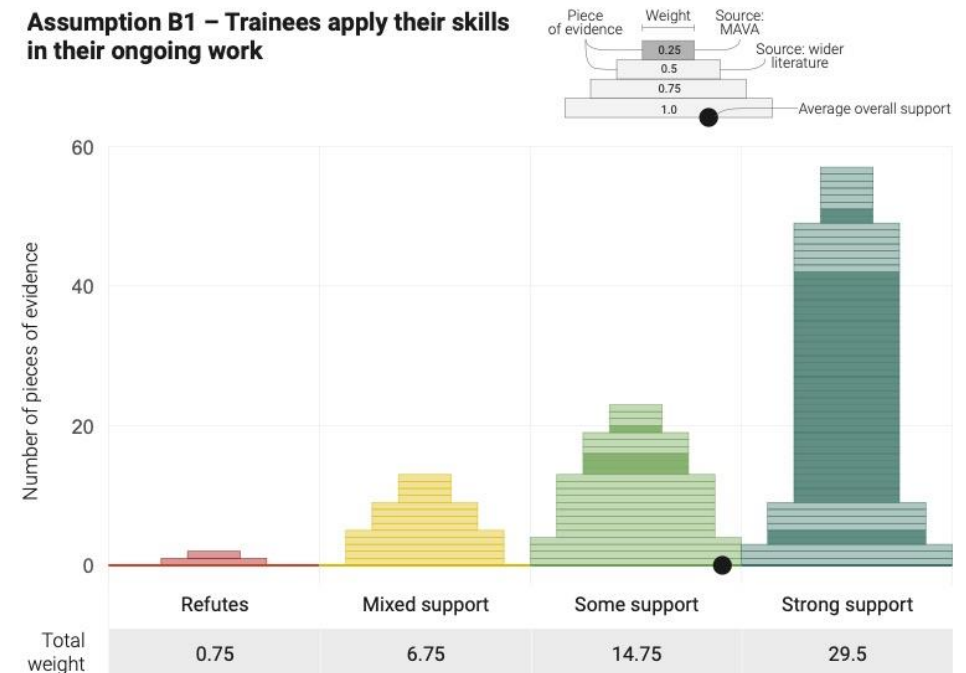
Figure 13: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

To assess this assumption, we considered 95 pieces of evidence obtained from different sources.

An in-depth search of the MAVA grants database provided 28 pieces of evidence from 16 sources that we could use to test this assumption. An initial review highlighted 78 grants relevant to the topic of capacity-building. Documentation – including progress reports, final reports and technical reports – was searched in detail for statements or claims that linked training with the use of skills by trainees.

A targeted questionnaire was sent to 40 grantees to provide further evidence. Five questions focused on the use of skills by trainees:

1. Do trainees apply the acquired skills in their ongoing work?
2. What are the reasons that only a few trainees apply the acquired skills?
3. If you do not know if the trainees apply the acquired skills in their ongoing work, can you explain the reasons?
4. What do you think was/is the motivation of the trainees to apply the acquired skills? Why is it useful for them to use their skills?
5. Were there additional actions to the capacity-building activity, ensuring that trainees could apply the acquired skills?

Each answer to Question 1 was used as evidence to test assumption B1. Thirteen answers from Questions 2–5 were used as evidence, and other answers provided context for the discussion.

A systematic search of the Conservation Evidence database provided 22 pieces of evidence from 22 sources that we could use to test this assumption. We found these sources using searches for the keywords train, teach, learn and capacity, supplemented with a search for actions relating to education and awareness.

That returned 142 conservation actions and over 1,000 studies. We focused on actions likely to contain relevant studies, leaving us with 110 studies to search.

Exploratory searches of the wider literature provided 32 pieces of evidence from 20 sources. There is extensive literature covering the outcomes of training interventions. We, therefore, made use of high-level, authoritative reviews and meta-analyses to guide our choice of sources in an attempt to provide a balanced view of the state of current knowledge.

Evidence assessment

Evidence from the MAVA grants database and questionnaires strongly supports this assumption. On balance, support from the wider literature is weak but variable, with many pieces of evidence showing mixed or strong support (Figure 12, Figure 13).

The MAVA questionnaire found that trainees applied their new skills in 27 of 29 cases. Nineteen grantees reported that a majority used their skills, eight reported that a small number did. In two instances, grantees were unsure.

While evidence from the MAVA grants database also found that trainees used their new skills, reports provided little detail on:

- the number of trainees using skills
- how conditions before, during and after training helped enable the application of new skills
- assessments of whether the goals of training interventions were reached.

"A well-trained and respected ranger team operates throughout the saiga range" (MAVA-G3, 2014)

"The eco-guards trained in bird counting techniques support the reserve staff in their activities. They have a better understanding of

bird counting techniques and at the same time participate in the monitoring and safeguarding of the KRG's ecosystems." (MAVA-G6, 2018) (translated from French)

Sources from the Conservation Evidence database mainly measured the uptake of conservation-oriented behaviours and knowledge or practical skills that may support livelihoods. One case documented the establishment of community-based management groups following seminars and workshops.

Practical advice for successful training

In the wider literature, decades of research have led to a detailed understanding of how trained skills are applied and practical solutions for designing and delivering successful training.

Ford et al., 2018 propose the following four pillars for designing successful training:

1. **Different individuals will learn differently**

Conscientiousness is linked to applying learned skills[71], particularly for complex, dynamic tasks[80].

Trainees must believe in their abilities before, during, and after training[72, 77, 86]. Trainees that feel motivated to learn and apply new skills are also more likely to do so[82].

This is in line with the MAVA questionnaire responses, in which MAVA grantees appreciated training that was targeted to their needs and were motivated by a desire to:

- ☐ improve their institution
- ☐ implement better conservation
- ☐ tackle big issues e.g. climate change

- ☐ understand new topics, e.g. conservation standards
- ☐ learn new skills e.g. fundraising
- ☐ make their activities more sustainable e.g. fisheries, agriculture, urban living

2. **The design of training and how it is implemented matters**

If using behaviour modelling training, consider including both positive and negative examples[48].

Training in error management can be particularly useful when training open or adaptive skills (Keith & Frese, 2008).

Using multiple learning strategies (e.g. case studies, worked examples, discussions) will likely lead to more effective training (Cook et al., 2013). As will active repetition (Roediger & Butler, 2011), self-explanation, and distributing training over a longer period of time (Dunlosky et al., 2013).

3. **Create a supportive work environment and allow trainees to use their new skills**

Creating a positive work environment that supports and encourages trainees will increase the chance of them using their new skills[70, 76, 78]. Support from both peers and supervisors can play an important role. Mentoring[83], coaching[84], assisting with specific tasks[85], and assisting with personal and professional challenges[84] may all help.

Trainees must be given the opportunity to use new skills[70]. Even short periods of non-use after training can be detrimental to skill use in the future[87–88].

The most successful training interventions may arise when trainees are motivated to use their new skills and organisations provide a supportive environment[81].

MAVA grantees appreciated working with professional mentors and sharing knowledge with them. They highlighted several ways that greater support helps them apply new skills:

- Equipment and financial support, e.g. grants to help implement action in the field
- Regular opportunities to meet and share advice between groups with different expertise
- Follow-ups to support skill use, maybe through webinars or social media
- Sharing of critical skills and methods
- Establishing networks of professionals
- Developing tools to help further uptake, e.g. infographics
- Organisational development, e.g. opening up higher leadership roles

4. **How you measure success can impact your conclusions – be wary of relying on a single measure**

Understanding which elements of training worked (and which did not) is key to improving future training interventions (Ford et al., 2018).

Measuring the impact of training often focuses on four things: reaction to training; learning from training; behaviours; and results following training. Those measuring the impact of training should be clear about what the intended learning is and select measures that reflect their chosen learning outcomes (Salas et al., 2012).

Measuring the use of learned skills is more challenging when trainees differ in their peak performance compared to their typical day-to-day performance ("can do" vs "will do"). Poor peak performance may be explained by inadequate training. In contrast, poor day-to-day performance may be explained by a failure to motivate and support trainees sufficiently[86].

Learning question C: Which skill deficits do organisations identify?

MAVA grantees are investing in delivering training to various audiences, targeting a diversity of topics. A detailed training needs analysis may reveal opportunities to improve the effectiveness of training interventions.

Assumption C1: Organisations know what actions and associated skills are required to carry out good practice

MAVA grantees are investing in delivering training to various audiences, targeting a diversity of topics. The evidence capture sheet provides a heatmap combining audiences with capacity-building topics.

What remains unknown is the degree to which that investment meets the needs of individuals and their organisations. The available evidence does not directly address whether capacity-building actions anchor in previously identified capacity deficiencies.

Great practical advice is available in the wider literature on designing and implementing a comprehensive training needs analysis. The conservation sector may benefit from greater exploration of these processes, leading to more efficient and impactful training interventions.

Evidence base

We found little evidence of MAVA grantees conducting assessments of their training needs. Therefore, we instead identified the types of training that grantees conducted and the recipients of that training. An in-depth search of the MAVA grants database provided 78 relevant grants. We supplemented this with a questionnaire sent to 40 MAVA grantees.

Exploratory searches of the wider literature found a high-level review of the practical implications of findings from training research. They make a case for the importance of conducting a detailed training needs analysis before training

begins. We present a series of their recommendations that should form the basis of any successful training programme.

Evidence assessment

Training topics and audiences in MAVA grants

When assessing the MAVA grants database, we identified 32 training topics and 19 target audiences (see the evidence capture sheet for details).

The top three learning topics covered by training interventions were:

1. Ecosystem/biodiversity management or conservation – taught 71 times to 13 different target audiences
2. Monitoring methods and tools – taught 39 times to 11 different target audiences
3. Climate change – taught 34 times to 16 different target audiences

The top three target audiences for training interventions were:

1. Protected area managers and staff – received 54 training interventions on 17 topics
2. Environmental NGOs – received 39 training interventions on 15 topics
3. Civil society organisations or community-based organisations – received 33 training interventions on 13 topics

The top three combinations of learning topic and target audience were:

1. Training in ecosystem/biodiversity management or conservation for protected area managers and staff – 11 training interventions
2. Training in ecosystem/biodiversity management or conservation for environmental NGOs – 10 training interventions
3. Training in ecosystem/biodiversity management or conservation for conservation professionals in general – 10 training interventions

Training needs analysis as a tool

A review article on the practical implications of training research made a series of recommendations for conducting a detailed training needs analysis (Salas et al., 2012).

The purpose of a training needs analysis is to determine 1) what needs to be trained; 2) who needs to be trained; 3) within what kind of organisational system will training and subsequent work occur.

The key outcomes of the analysis are:

- Expected learning outcomes
- Guidance for design and delivery of training
- Plan for evaluating training
- Information about the organisation that may help or hinder training efforts

The three key components of training needs analysis are (adapted from Salas et al., 2012):

1. Job task analysis
   - Given a clear training objective, identify the critical knowledge, skills, and attitudes needed to complete these tasks.
   - This step is often replaced by asking trainees, "what training do you want to take?" However, trainees may not be able to articulate their real training needs. When jobs are knowledge-based, conducting an additional cognitive task analysis may be necessary.
   - When trainees work in teams, consider a team task analysis. That should highlight which tasks require coordination and how team members can coordinate.

2. Organisational analysis
   - Here the focus is on the training needs of the organisation. Consider whether the organisation's strategic priorities are aligned with potential training endeavours.
   - An assessment of the organisation's readiness to receive the training and support the trainees is of equal importance. Organisational support can be vital in ensuring trainees apply their newly learned skills.
   - Support could involve providing encouragement and tolerating mistakes; covering other tasks the trainee may have; or providing opportunities to practice and use newly acquired skills.

3. Person analysis
   - The final step is to identify who needs training and what training they need. Those lacking the skills identified in the job task analysis will be priority candidates for training.
   - Assessing the critical characteristics of potential trainees will also allow training design to suit their needs. Considering what motivates trainees and whether they are learning or performance-oriented may help.

Learning question D: Do trained people stay with their organisations or in the sector?

We cannot draw strong conclusions on whether trained staff are more likely to stay with their organisation. Working conditions, including pay, career progression opportunities, and training types, can all impact staff turnover. Improved reporting by grantees on employee post-training destinations could be very informative for this topic.

Assumption D1: Trained people stay with their organisations for at least five years after the training

We cannot draw strong conclusions on whether trained staff are likely to stay with their organisation. Addressing this knowledge gap should be a priority for the conservation sector. However, a distinction should be made between trainees who leave their organisations and those who leave the sector. Tracking

information about where trainees end up working after training will be hugely valuable for this effort. (Figure 14, Figure 15)

Review the evidence used for this assumption in the evidence capture sheet.

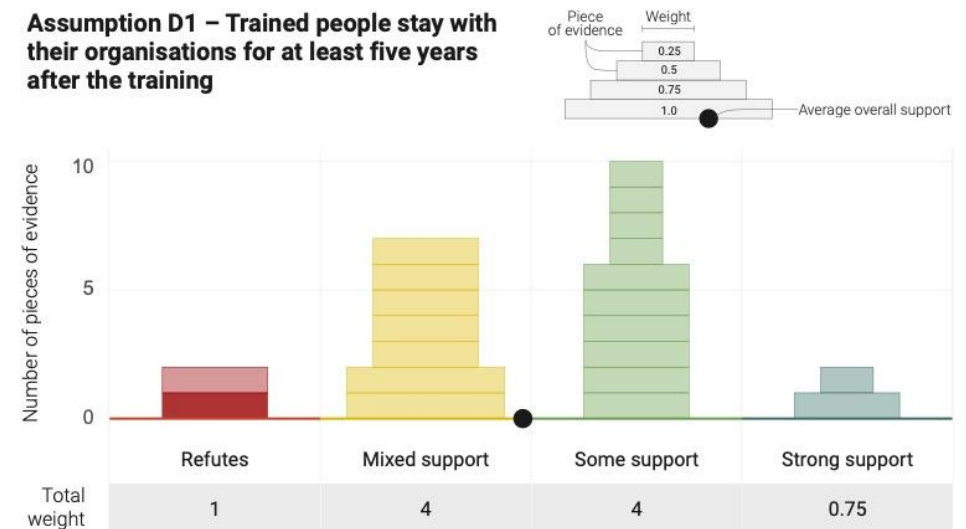Figure 14: Combined evidence from MAVA grants and wider literature.

Figure 15: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

We considered 21 pieces of evidence obtained from different sources to assess this assumption.

An in-depth search of the MAVA grants database provided only one piece of evidence that we could use to test this assumption. An initial review highlighted 78 grants relevant to the topic of capacity-building. Documentation – including progress reports, final reports, and technical reports – was searched in detail for statements or claims that linked training with staff turnover.

Exploratory searches of the wider literature found 20 pieces of evidence from 15 sources that we could use to test this assumption. This assumption was covered less extensively than others in training and capacity-building. However, we found one literature review to help guide the search for evidence.

This assumption is beyond the scope of the Conservation Evidence database.

Evidence assessment

On balance, the evidence neither strongly supports nor refutes the assumption. Evidence for this assumption was notably lacking from the MAVA grants database, with only a single piece found (Figure 14, Figure 15).

Training may be one of many factors that impact staff turnover, but is unlikely to be the most important. Other factors include job satisfaction, working conditions and hours, pay, and opportunities for progression. Training may have links with some of these other factors[11, 15], and poor training might exacerbate other problems that cause employees to leave[11].

The potential for progression within the organisation can also impact perceptions of training. While hotel managers had a somewhat positive view of training in one study, employees were less enthusiastic and over half of employees reported training fatigue[7].

The types of skills being trained also matter, as does whether those skills increase trainee prospects at their current job or the broader job market[8, 16]. Employees trained in open, transferable skills[20] or multi-skill training[8] may be more likely to seek employment elsewhere.

PARTNERSHIPS & ALLIANCES

Key findings:

Being part of a partnership often brings added value to the partners. Partnerships frequently achieve more than individual partners could by acting alone. (see learning question A)

Partners should expect to invest significant time and resources into developing and maintaining successful relationships. There is a need for expectation management about what the partnership can achieve and how. (see learning question A)

There is no standard recipe for the perfect partnership. The partnership's scope and mission, the community's maturity, and leadership roles may all contribute to how alliances function. (see learning question B)

Some partnerships can acquire significant additional funds, while others find it challenging. In the future, alliances could set the conservation agenda and funders co-design or rally around it. (see learning question C)

OVERVIEW OF THE LEARNING TOPIC

Partnerships and alliances have always been vital mechanisms for conservation actors to leverage their strengths to achieve a more significant impact together.

The MAVA foundation has invested over 70 million Swiss francs in strategic partnerships and integrated conservation planning and management over the last 30 years.

For the foundation's final strategy starting in 2016, MAVA has moved from working with individual projects to working with key partners on the level of integrated programmes. Selected partner organisations formed strategic partnerships and jointly designed these programmes to deliver ambitious outcomes (see Strategic Partnerships: MAVA's approach to scaling up conservation impact for more information).

Establishing 25 strategic partnerships generated a wealth of data and lessons that the learning initiative and involved partners were excited to collect and systematise.

LEARNING QUESTIONS AND ASSUMPTIONS

The idea behind establishing partnerships is that a set of partners with complementary skills, backgrounds, and experience jointly have a higher likelihood of achieving outcomes than individual organisations on their own.

The assumption is that a successful strategic partnership has a few key ingredients and enabling conditions: a legal framework and financial resources, relevant partners, and sufficient knowledge, skills and interest.

A diverse group of partners must agree on a joint interpretation of their problem analysis and a shared vision and plan. A functioning partnership continuously sharpens its strategic choices.

If partners deliver on their agreed contribution to the joint plan, the partnership gains recognition, personality, and authority. It can effectively implement its strategy and achieve more significant outcomes than individual partners.

We have explored the following aspects of strategic partnerships and conservation alliances (Figure 16):

1. Whether being part of a partnership is **beneficial for involved partners** (see learning question A)
2. Whether partners together can **deliver more than they can achieve alone** (see learning question A)
3. What we can learn about the **set-up of alliances and partnerships** (see learning question B)
4. Which **costs and benefits** strategic partnerships imply (see learning question C)

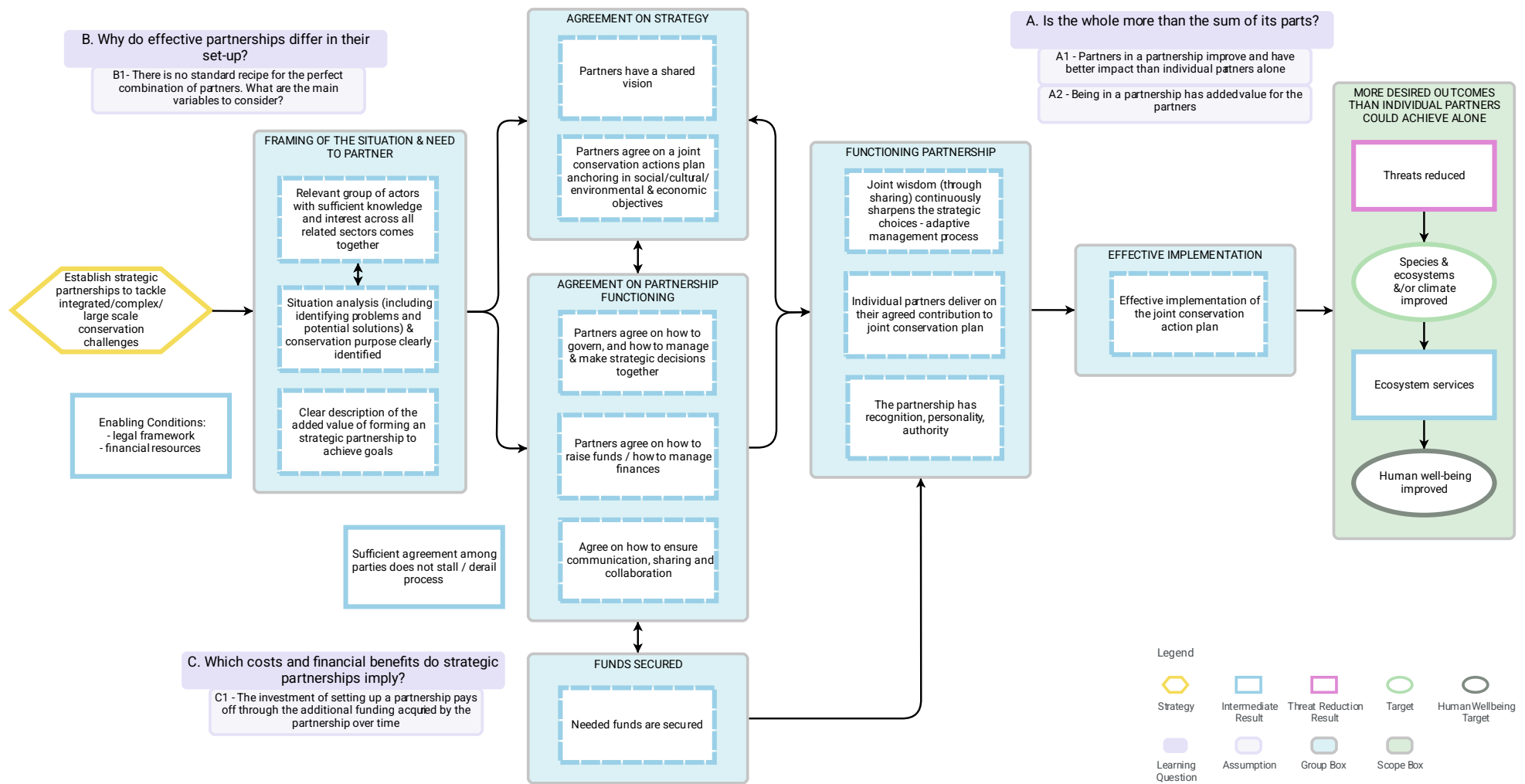**B. Why do effective partnerships differ in their set-up?**

B1- There is no standard recipe for the perfect combination of partners. What are the main variables to consider?

AGREEMENT ON STRATEGY

- Partners have a shared vision
- Partners agree on a joint conservation actions plan anchoring in social/cultural/ environmental & economic objectives

A. Is the whole more than the sum of its parts?

A1 - Partners in a partnership improve and have better impact than individual partners alone

A2 - Being in a partnership has added value for the partners

FRAMING OF THE SITUATION & NEED TO PARTNER

- Relevant group of actors with sufficient knowledge and interest across all related sectors comes together
- Situation analysis (including identifying problems and potential solutions) & conservation purpose clearly identified
- Clear description of the added value of forming an strategic partnership to achieve goals

Establish strategic partnerships to tackle integrated/complex/ large scale conservation challenges

Enabling Conditions:
- legal framework
- financial resources

AGREEMENT ON PARTNERSHIP FUNCTIONING

- Partners agree on how to govern, and how to manage & make strategic decisions together
- Partners agree on how to raise funds / how to manage finances
- Agree on how to ensure communication, sharing and collaboration

Sufficient agreement among parties does not stall / derail process

FUNCTIONING PARTNERSHIP

- Joint wisdom (through sharing) continuously sharpens the strategic choices - adaptive management process
- Individual partners deliver on their agreed contribution to joint conservation plan
- The partnership has recognition, personality, authority

EFFECTIVE IMPLEMENTATION

- Effective implementation of the joint conservation action plan

MORE DESIRED OUTCOMES THAN INDIVIDUAL PARTNERS COULD ACHIEVE ALONE

- Threats reduced
- Species & ecosystems &/or climate improved
- Ecosystem services
- Human well-being improved

C. Which costs and financial benefits do strategic partnerships imply?

C1 - The investment of setting up a partnership pays off through the additional funding acquired by the partnership over time

FUNDS SECURED

- Needed funds are secured

Legend

Strategy	Intermediate Result	Threat Reduction Result	Target	Human Wellbeing Target
Learning Question	Assumption	Group Box	Scope Box	

Figure 16: The theory of change, learning questions, and assumptions for the learning topic Partnerships and alliances. Note that the darker purple boxes contain the learning questions. The light purple boxes show the associated assumptions. This theory of change with learning questions and assumptions has been developed using Miradi Share. You can access this theory of change directly on the Conservation Actions and Measures Library (CAML).

EVIDENCE AND FINDINGS

The figure below shows an overview of the main findings. Note that these summary ratings do not represent uncertainty and level of confidence in the evidence appropriately. For the full picture, please review the evidence base and assessment for each assumption.

LEARNING QUESTION / ASSUMPTION   FINDINGS

Is the whole more than the sum of its parts?

Partners in a partnership improve and have better impact than individual partners alone   **+**

Being in a partnership has added value for the partners   **+**

Why do effective partnerships differ in their set-up?

There is no standard recipe for the perfect combination of partners.
(What are the main variables to consider?)   **+**   **++**

Which costs and financial benefits do strategic partnerships imply?

The investment of setting up a partnership pays off through the additional funding acquired by the partnership over time   **±**

      - refuted   ± mixed support   + some support   ++ strong support

Learning question A: Is the whole more than the sum of its parts?

Being part of a partnership often brings added value to the partners. We find several cases where partnerships have achieved more than individual partners could by acting alone. However, partners should expect to invest significant time and resources into developing and maintaining successful collaborative relationships. Acknowledging inherent complexities, investing correctly, and seeing collaboration as a means to an end may help to manage the expectations of those forming partnerships to solve complex conservation problems.

Assumption A1: Partners in a partnership improve and have a better impact than individual partners alone

The evidence supports the assumption that partners in a partnership improve and have a better impact than individual partners alone. Positive outcomes were seen in various areas, from sharing knowledge or resources to a greater potential for innovative thinking.

Other sources warn that collaboration requires significant additional investment and should be considered a means to an end rather than an end in itself.

Those seeking successful partnerships should:

- Acknowledge the complexity that will come with collaboration (even defining goals is complex (Vangen & Huxham, 2012))
- Clarify what change means for all partners
- Temper expectations about how achievements can and will be evaluated (Elliott, 2022).

Review the evidence used for this assumption in the evidence capture sheet.
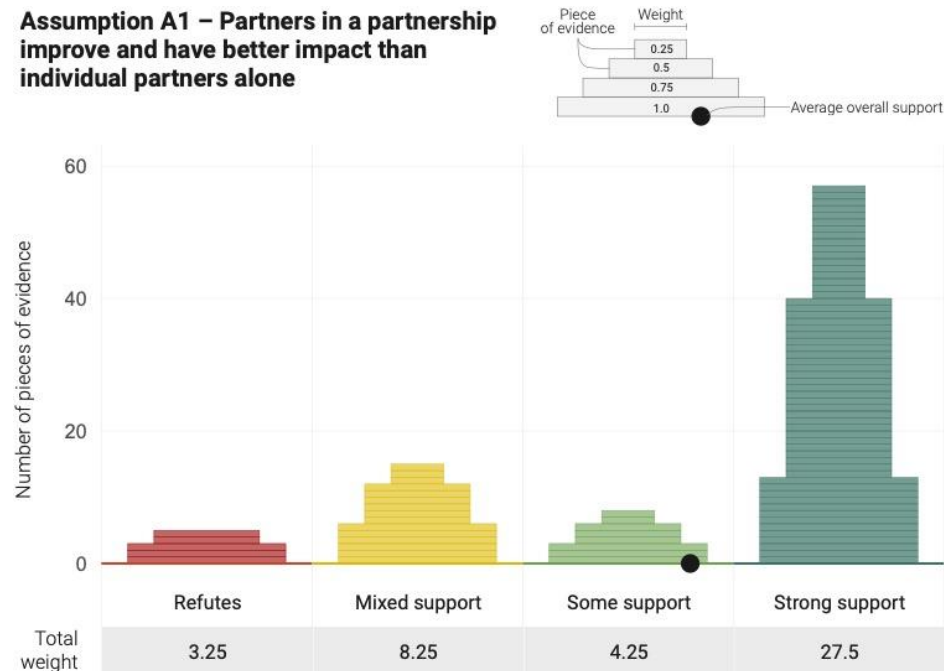
Figure 17: Combined evidence from MAVA grants and wider literature.
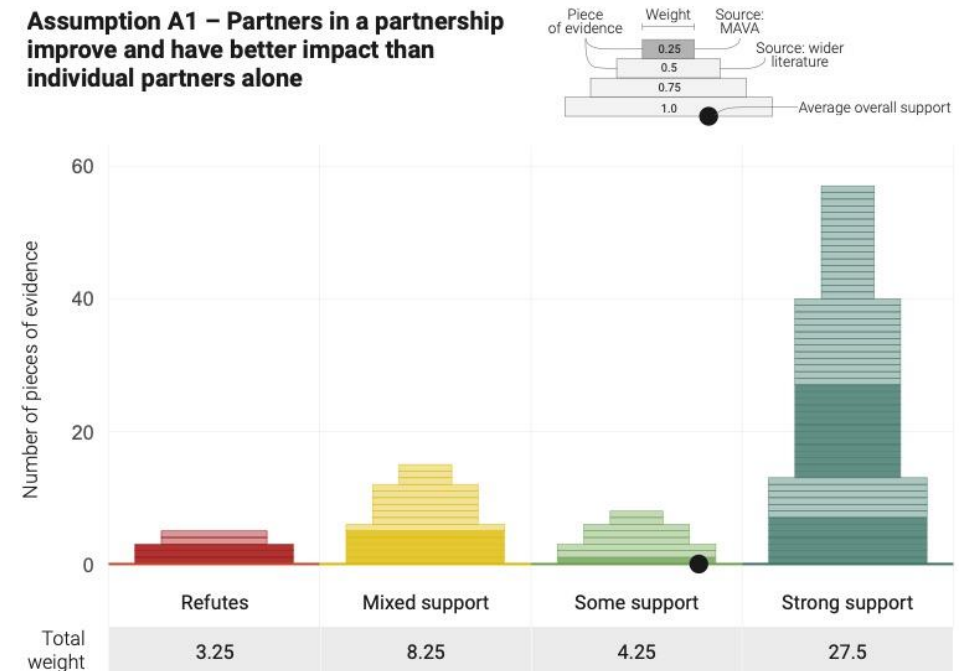
Figure 18: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

To assess this assumption, we considered 57 pieces of evidence obtained from different sources.

A targeted questionnaire sent to 16 MAVA grantees provided 30 pieces of evidence. All recipients of the questionnaire were part of partnerships, for which MAVA provided both financial and in-kind support. The questionnaire was distributed to grantees in 2018–2019 as a means of evaluating the performance of the partnership.

Two statements in the survey focused on this assumption. Respondents indicated to what extent they agreed and provided free text to clarify their answer:

1. The exchange of knowledge has helped your organisation improve and have an impact
2. The political influence of the partnership has helped your organisation have a concrete impact

A systematic search of the Conservation Evidence database provided 27 pieces of evidence from 26 sources. We found these sources using keyword searches for partnership, partner, alliance, integrated planning, and integrated management. This returned 17 conservation actions and 262 studies. All study summaries were searched for evidence.

Finally, exploratory searches of the wider literature found 28 pieces of evidence from 14 sources. One source found through searches was a PhD thesis (Elliott, 2022). Following discussions with the author, this thesis provided several evidence pieces, as well as a range of other studies to explore further.

Evidence assessment

On balance, the evidence provides some to strong support for this assumption (Figure 17, Figure 18).

Stronger collectively

Most MAVA grantee answers to provided evidence that strongly supported the assumption. In particular, responses highlighted the value of exchanging knowledge, which helped organisations improve and have an impact.

Examples from the wider literature found that some partnerships could deliver more by operating over very large spatial scales, through collaborative governance [59–62], [72-74] * and "connectivity conservation"[63]. Evidence showed an increased capacity at the operational level:

- to deliver on projects
- for outreach and education[67]
- for monitoring and enforcement[68].

Other examples of success included sharing of data and processes[68]; innovation[81] arising from collaboration; and delivering higher quality management of watersheds[72–73] through collaborative governance.

There were also some cases from the Conservation Evidence database of successful community management and protection of natural resources and wildlife; community involvement in land management schemes; and community-based restoration. Another common theme was increasing organisational capacity by mobilising volunteers.

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* The number in superscript represents an evidence piece that was used to test the assumption. Each number links to the corresponding row in the evidence capture sheet.

A means to an end

MAVA grantees provided more mixed responses when questioned about the political influence of their partnership. While some felt that the partnership had increased their influence, others did not.

Some evidence from the wider literature also provided a more mixed outlook. Some raised the point that collaboration is not a "magical cure" or "silver bullet", and should be viewed as a means to an end, not an end in itself[64, 80]. Concerns were raised that added bureaucracy can get in the way of delivering on actual goals[69]. While some partnerships considered themselves to be flexible and adaptable, others struggled to respond quickly to changing contexts[85].

It is worth taking into account that answers from MAVA grantees were self-reported, and no formal assessment of each partnership's impact was undertaken. This challenge of measuring the impact of partnerships and collaborative projects is broadly recognised. Perceived successes can come from delivering outputs and changing processes (e.g. agreements, plans, projects), through to having on-the-ground impacts (e.g. changes to land cover, biodiversity, pollution). However, considerable challenges remain in understanding how a partnership's outputs lead to environmental outcomes[77].

Collaborative advantage

Partnerships and their goals are inherently complex, and individual partners may have different understandings of what success looks like (Elliott, 2022) and how it can be measured. A growing body of research that explores the "theory of collaborative advantage" (Vangen & Huxham, 2014) is embracing this complexity, and a key part of these efforts is to provide practical guidance for those seeking to make a success of collaboration.

A final consideration regarding evidence from MAVA grantees is that there may be some potential for bias. This is because answers were not anonymous and were in response to a questionnaire sent by their donor. However, the mix of positive and negative responses to questions does provide some confidence that the answers gave a balanced view of grantee experiences.

Assumption A2: Being in a partnership has added value for the partners

The evidence highlights several ways in which partnerships may bring added value for partners. However, some sources also reveal that significant challenges must be overcome to enjoy the benefits of collaboration, and those benefits may not always be shared equally between partners.

Partners should expect to invest significant time and resources into building and maintaining collaborative relationships and developing the processes that will allow for a functioning partnership.

Collaboration is unlikely to be the solution to all problems, and even when it is, it may not be conflict-free. Conflict can at times stimulate new ideas and lead to innovations, and so it may be worth embracing this challenge.

Review the evidence used for this assumption in the evidence capture sheet.

Figure 19: Combined evidence from MAVA grants and wider literature.

Figure 20: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

To assess this assumption, we considered 45 pieces of evidence obtained from different sources.

A targeted questionnaire sent to 16 MAVA grantees provided 18 pieces of evidence. All recipients of the questionnaire were part of partnerships, for which MAVA provided both financial and in-kind support. The questionnaire was distributed to grantees in 2018–2019 as a means of evaluating the performance of the partnership.

Two statements in the survey focused on this assumption. Respondents indicated to what extent they agreed and provided free text to clarify their answer:

1. Being a partner has an added value for your organisation
2. After MAVA closes, your organisation identifies the need and advantage to continue collaborating within this partnership

Some variations of question two were used for different grantees, including "Your organisation is willing to actively engage within the partnership beyond 2022 and is committed to fundraise to support such cooperation" and "Your organisation will continue collaborative work and fundraising for the partnership after the end of MAVA funding from 2022 onwards".

A systematic search of the Conservation Evidence database provided 5 pieces of evidence from 5 different sources. We found these sources using searches with the keywords partnership, partner, alliance, integrated planning, and integrated management. This returned 17 conservation actions and 262 studies. All study summaries were searched for evidence.

Finally, exploratory searches of the wider literature found 22 pieces of evidence from 10 sources. One source found through searches was a PhD thesis (Elliott, 2022). Following discussions with the author, this thesis provided several evidence pieces, as well as a range of other studies to explore further.

Evidence assessment

On balance, the evidence provides some to strong support for the assumption. While all evidence from MAVA questionnaires showed strong support, evidence from the wider literature was more mixed (Figure 19, Figure 20).

Added value of partnering

Among the MAVA grantees that responded, all reported that the partnership had brought added value to them and that they would continue to show a commitment to the partnership into the future.

Evidence in support from the wider literature highlighted several benefits brought by being in a partnership:

- **Sharing or pooling resources** – from sharing of equipment, databases, and technical tools (e.g. computer models)[24]; to co-locating staff and creatively pooling financial resources[25]; to sharing policies, regulations and social norms[26].
- **Creation of collaborative organisations**[27] that become independent of each partner and work to enact the collaboration. However, building these organisations is not without challenges.
- **Healthy competition of ideas**[34], where some conflicts can and should occur. Some level of conflict may lead to improvements and progress.
- **Building networks and communities**[34, 39, 40] – including building long-term working relationships, trust, and mutual understanding between partners, and an increased ability to work with diverse stakeholders.
- **Innovation**[42, 43]. Collaboration can stimulate and encourage innovation.

Learning to collaborate

Other evidence pieces suggested a more mixed view of the benefits of being in a partnership.

Building collaborative organisations requires a large investment of time and resources to build the necessary trust and relationships[32]. Learning to collectively manage grants, contracts, and personnel[31] also takes time, especially if new administrative problems are to be avoided. There is also the potential for costs and benefits to be spread unevenly between different partners[41].

One study makes the simple point that organisations learn to collaborate by collaborating[30].

Issues can arise with time

Only two pieces refuted the evidence. One described how new collaborative organisations experience growing pains and can be overwhelmed by the effort required to develop and maintain the partnership[33].

The other source documented a failed collaboration between wildlife conservation groups and a petroleum company. New personnel brought different perspectives and motivations, "causing the good faith bargaining evident in the first year to waver", and communications between several partners broke down[35].

A final consideration regarding evidence from MAVA grantees is that there may be some potential for bias. This is because answers were not anonymous and were in response to a questionnaire sent by their donor. However, the mix of positive and negative responses to questions does provide some confidence that the answers gave a balanced view of grantee experiences.

Learning question B: Why do effective partnerships differ in their set-up?

While there is no standard recipe for the perfect partnership, there is now practical advice available on how to achieve change through working collaboratively. The scope and mission of the partnership, the maturity of the community, and how leadership roles will function may all contribute to how collaborations will function.

Assumption B1: There is no standard recipe for the perfect combination of partners. What are the main variables to consider?

The evidence supports the assumption that there is no standard recipe for the perfect combination of partners.

MAVA partnership managers highlighted that scope and mission of the partnership, the maturity of the community, and the role of good leadership are key features of partnerships. However, it may be wrong to consider any of these as explicit drivers of success. A framing from the wider literature was that different collaborative structures emerge depending on the interplay between context, knowledge, process, and vision.

While there is likely no standard recipe for the perfect partnership, there is increasing practical advice available that may help to guide partnerships towards achieving change through collaboration.

Review the evidence used for this assumption in the evidence capture sheet.

Figure 21: Combined evidence from MAVA grants and wider literature.

Figure 22: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

To assess this assumption, we considered 14 pieces of evidence obtained from different sources.

An analysis of the features of MAVA's strategic partnerships provided one piece of evidence. We assessed the features of the partnerships and their ability to raise external funds. Features included: number of partners, geographic scope, main objective of the partnership, type of partner, costs to set up the partnership and the average annual running costs.

Exploratory searches of the wider literature found 13 pieces of evidence from eight sources. One source found through searches was a PhD thesis (Elliott, 2022). Following discussions with the author, this thesis provided several evidence pieces, as well as a range of other studies to explore further.

Finally, to better understand the most important factors that contribute to a good partnership, we ran a four-hour workshop with six experienced partnership managers from the MAVA team.

Evidence assessment

All the evidence considered supported the assumption that there is no standard recipe for the perfect combination of partners (Figure 21, Figure 22).

Factors in MAVA partnerships

The most important factors highlighted by MAVA partnership managers included:

- The scope/mission of the partnership
  - "The more complex topics tend to be the more mature topics. More complex topics tend to imply 1) the need to work at more levels (local – international), 2) more types of partners (govt, NGOs, etc.), 3) more diverse set of conservation strategies" [statement agreed by three partnership managers]
- Maturity of the community
  - "Communication between partners is easier if they know each other for a long time – but that doesn't mean they also function well together" [statement agreed by three partnership managers]
  - "Often, it is more about the trust between people than trust between organisations/partners" [statement agreed by three partnership managers]
  - "In some cases, mature partnerships are more efficient because of little upfront / overhead investment – you can get to the bottom of things straight away" [statement agreed by three partnership managers]
  - "Sometimes the maturity/size/complexity of individual partners makes collaboration very hard as well" [statement agreed by three partnership managers]
- Leadership in the partner organisations and in the partnership as a whole.
- "Good leadership (leaders and key people) leads to functioning partnerships" [statement agreed by three partnership managers]

- "Having good leaders among all key partners is important – can even lead to 'joint' leadership of the partnership" [statement agreed by three partnership managers]
- "Targeted investment in leadership development of key partners can do the trick" [statement agreed by three partnership managers]
- "Sharing responsibility and leadership on a rolling basis can work really well – time horizon is critical though" [statement agreed by three partnership managers]

Factors from wider literature

Evidence from the wider literature also supported the assumption that there is no standard recipe for a partnership. Some collaborations have found success by taking it in turns to step into leadership roles[2, 3] depending on the skills required for a particular project. Others have employed "network governance" approaches to further collective interests, rather than those of any one partner[4].

Some collaborations moved towards inclusion of a wide range of actors[4]. Others made a point of excluding certain organisations or interest groups[8], preferring to limit partners to those that share the same values or mission. There are also differing opinions when it comes to the role of funders and whether they are considered external to, or part of, the partnership[12].

One study suggests that different approaches to collaboration will emerge from the interplay between context, knowledge, process, and vision[9]. In this instance, "process" refers to the formal and informal rules that shape action, and "vision" refers to motivations that guide action (Wyborn, 2015).

Wide variation in what works

A review of large-scale conservation in England, Scotland, and Wales demonstrates the huge variation in the make-up of different partnerships, as well as in the perceptions of what makes for a good partnership[12]. Two quotes from survey respondents demonstrate the point nicely:

"Large partnerships do not work, little gets achieved. Keep it simple"

"The bigger the partnership, the more security the project has, as there is more trust."

There was large variation found within partnerships supported by MAVA as well:

- Number of partners – ranged from one to 46
- Geographic scope – from a single country to a whole region, e.g. the Mediterranean or West Africa
- Main objective – from protection of a single species, to protection of a habitat type, to promotion of a broad strategy such as establishing circular economies
- Composition of partners – combinations of NGOs, foundations, research institutes and governmental institutions
- Set-up costs – ranged from 4,800 to 350,000 EUR
- Annual running costs – ranged from 9,700 to 301,600 EUR
- Fundraising ranged from 374,000 to 11,000,000 EUR, or 24,400,000 EUR in one unique case

Given that partnerships are very variable, and success is not dependent on a standard recipe, one study suggests that the focus should be on securing long-term outcomes that are resilient in the face of changes to funding, priorities of landowners, land ownership, organisational practices, and staff turnover[11].

Practical advice

Finally, while a prescriptive approach to designing successful partnerships may be misguided, there is practical advice available for how change may be achieved through collaboration (adapted from Elliott, 2022):

- **Acknowledge the complexity and cost of inter-organisational collaboration.** Collaborations are inherently complex, so cultivate realistic expectations regarding the efforts needed to manage and sustain them.
- **Consider the nature of the collaborative context.** Will the collaboration deal with simple, complex, or chaotic problems? For complex and unpredictable problems, pre-determined approaches to achieving change are unlikely to be appropriate.
- **Work effectively across multiple forms of difference.** Time, space, flexibility, and respect are needed to develop an understanding of different groups, cultures, or perspectives and to develop synergy from those differences.
- **Manage diversity for complexity and innovation.** Diverse collaborations may be well-placed to address complex problems, but recognising the importance (and cost) of actively managing diversity within the collaboration is key (Vangen, 2017), (Vangen & Winchester, 2014).
- **Clarify understandings of change.** Change is complex (Maes & Van Hootegem, 2011) and conservation literature and practice has so far not produced a consistent understanding of the concept. Clarifying understandings of change should enable better management of change-related decisions.
- **Recalibrate expectations for the evaluation of collaborative achievements.** Consider social factors, the integration, and understanding of multiple perspectives, and multifaceted collaborative goals when evaluating the effectiveness of collaboration.
- **Consider whether and how the collaboration can respond to change.** Consider how factors such as size, funding, and level of collaborative activity might impact a collaboration's ability to be flexible and responsive, and ensure that expectations of adaptability are aligned and realistic.

Learning question C: Which costs and financial benefits do strategic partnerships imply?

While some partnerships can acquire significant additional funds, others find it more of a challenge. Individual partners can sometimes feel that they are competing for a limited pot of funds. A different approach could be conservation alliances setting the conservation agenda and interested funders rallying around it, or engaging in co-design from the start.

Assumption C1: The investment of setting up a partnership pays off through the additional funding acquired by the partnership over time

From the limited available evidence, we found some examples where partnerships were able to acquire significant additional funding. We also found examples where the opposite was true. In some cases, partners felt that they were in direct competition for limited funds.

In-house knowledge and expertise may increase a particular partnership's capacity for fundraising. But that in itself won't be sufficient. There will often be a requirement of upfront investment of time and resources. This may be in short supply for many nascent partnerships.

A restructuring of the relationship between funders and grantees could see funders engage in meaningful co-design of projects that address the most pressing conservation challenges, with the agenda set by conservation collaborations.

Review the evidence used for this assumption in the evidence capture sheet.
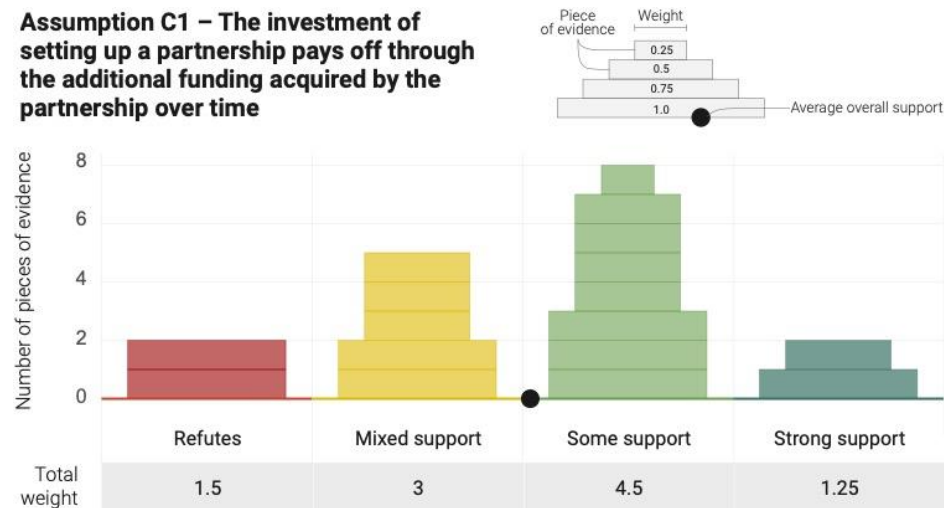
Figure 23: Combined evidence from MAVA grants and wider literature.
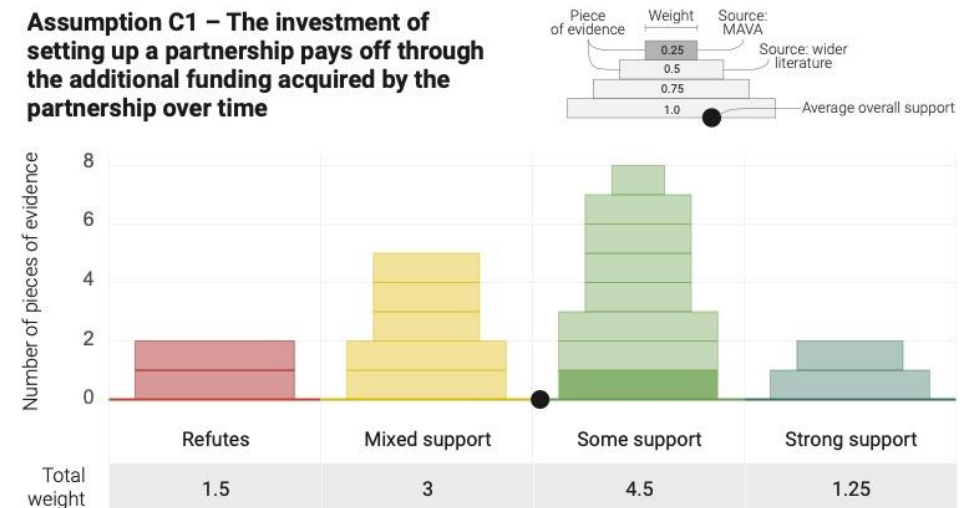
Figure 24: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

To assess this assumption, we considered 17 pieces of evidence obtained from different sources.

An analysis of the funds raised by 19 strategic partnerships, established and supported by MAVA, provided one piece of evidence. We compared the funds raised by each partnership (as of March 2021) with 1) their estimated set-up costs; 2) their average annual running costs; and 3) their total budget.

The average annual running costs included:

- the cost of Steering Committee Meetings
- the funds provided to the coordinating partner(s)
- the funds invested in communication (internal and external) and materials
- the funds invested in fundraising and partnership development.

This figure does not include the time of MAVA staff to support the partnership; the costs of the Mid-Term Evaluation process; nor the support provided by FOS Europe to each partnership.

 A systematic search of the Conservation Evidence database provided one piece of evidence from one source. We found this source using searches for the keywords partnership, partner, alliance, integrated planning, and integrated management. This returned 17 conservation actions and 262 studies. All study summaries were searched for evidence.

 Finally, exploratory searches of the wider literature found 15 pieces of evidence from five sources. One source found through searches was a PhD thesis (Elliott, 2022). Following discussions with the author, this thesis provided several evidence pieces, as well as a range of other studies to explore further.

Evidence assessment

On balance, the evidence we found neither supports nor refutes the assumption (Figure 23, Figure 24).

Among the 19 MAVA partnerships, 16 raised funds in excess of their estimated set-up costs; 13 raised funds in excess of their set-up costs and average annual running costs; and 18 raised significant shares of their total budget. This provides some support for the assumption.

Evidence from the wider literature presented a more mixed view of the capacity for partnerships to raise additional funds.

Some partnerships showed a clear ability to raise large amounts of additional funding from sources that had not previously contributed to individual partners[35]. Some partners felt that collectively applying for grants increased their chances of success[30], particularly when the partnership could present a broad, longer-term strategy[39].

However, when available funds are limited, partners in a partnership may end up competing with each other[37], with potentially damaging consequences for the partnership[31]. One source found that the ambitions of the partnership as a whole may at times be seen as a threat to some partner organisations[38].

While collaborating may bring long-term benefits, organisations may be put off by the upfront costs[29]. One study revealed a funding "chicken-and-egg" dilemma relating to what comes first: seeking funding or developing a collaborative idea (Elliott, 2022). While it may seem logical to first develop an idea, this process can take significant investment of time and resources, which may not be possible without funds.

What is clear is that for many collaborative organisations, securing enough funding is a major concern[40]. As a result, in-house knowledge and expertise in fundraising are very valuable assets[40].

More broadly, there is a view that the relationship between grantees and funders may need to change. Instead of funders determining the conservation agenda, a reorganisation could see conservation collaborations advising funders on conservation priorities and how they should be addressed (Elliott, 2022) – a concept very much in line with MAVA's approach to strategic partnerships.

FLEXIBLE FUNDING

Key findings:

The evidence suggests that organisations receiving flexible funding are more likely to work strategically and implement their plans. A shift towards a greater proportion of flexible funding may lead to improved delivery by conservation organisations. (see learning question A)

Data shows that organisations often use flexible funds to invest in organisational development and maturity. In some cases, unrestricted funds are also used to acquire additional funding. Further investigation is needed to determine whether this consistently leads to greater financial sustainability. (see learning question B)

Flexible funding can play a role in increasing the resilience of non-profit organisations. In addition, quick, non-bureaucratic funding may be an important lifeline during times of crisis. (see learning question C)

OVERVIEW OF THE LEARNING TOPIC

There is an ongoing debate in the international donor community about the role flexible funding plays in strengthening conservation organisations. The MAVA foundation always believed that supporting key partners with flexible funding makes a difference in their capacity to deliver lasting conservation impacts.

'Flexible funding' refers to three types of funding donors provide to conservation organisations with a certain level of flexibility:

1. flexible funding **in the context of an existing strategic plan** (often called 'programmatic funding')
2. flexible funding **for organisational administration and development** (often called 'core funding') not to be confused with targeted organisational development grants
3. flexible **emergency funding** in the event of a crisis (e.g., COVID-19)

We tried to understand if flexible funding leads to more mature conservation organisations along three main lines:

1. **being more strategic** in their conservation work
2. **being more sustainable** financially and as an organisation
3. **being more resilient** and able to overcome crises

LEARNING QUESTIONS AND ASSUMPTIONS

The donor strategy behind providing flexible funding is that it leads to financial sustainability, ensures financial security for organisations, and with that improves conservation practice:

1. Organisations professionalise by investing in tools and systems and maintain the required skills to implement state-of-the-art strategies.
2. Organisations focus on what they believe is essential, take bolder actions, and think outside the box because they are not tied to specific donor requirements.
3. Organisations successfully fundraise because they can cover overhead costs and bring in other grants that require match funding.

It is difficult to show with evidence whether conservation practice improves with flexible funding. But we still wanted to understand better what effect flexible funding has on some essential outcomes (Figure 25):

- Do organisations work **more strategically**? (see learning question A)
- Are organisations **more financially and organisationally sustainable**? (see learning question B)
- Does flexible funding help organisations **overcome unforeseen challenges in moments of crisis**? (see learning question C)
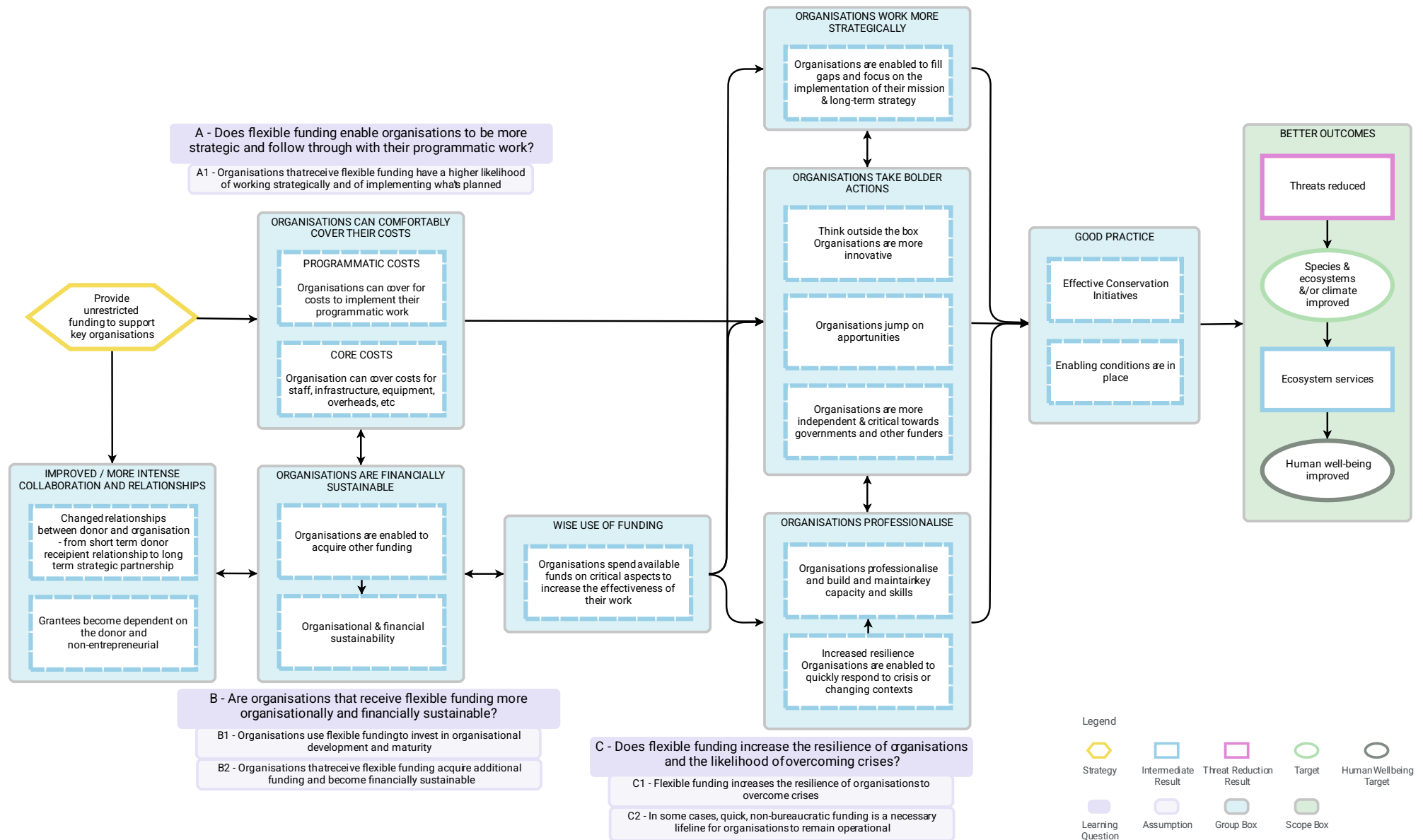
Figure 25: The theory of change, learning questions and assumptions for the learning topic 'Flexible funding'. Note that the darker purple boxes contain the learning questions. The light purple boxes show the associated assumptions. This theory of change with learning questions and assumptions has been developed using _Miradi Share_. You can _access this theory of change directly_ on the Conservation Actions and Measures Library (CAML).

EVIDENCE AND FINDINGS

The figure below shows an overview of the main findings. Note that these summary ratings do not represent uncertainty and level of confidence in the evidence appropriately. For the full picture, please review the evidence base and assessment for each assumption.

LEARNING QUESTION / ASSUMPTION   FINDINGS

Does flexible funding enable organisations to be more strategic and follow through with their programmatic work?

Organisations that receive flexible funding have a higher likelihood of working strategically and of implementing what's planned   **+** **++**

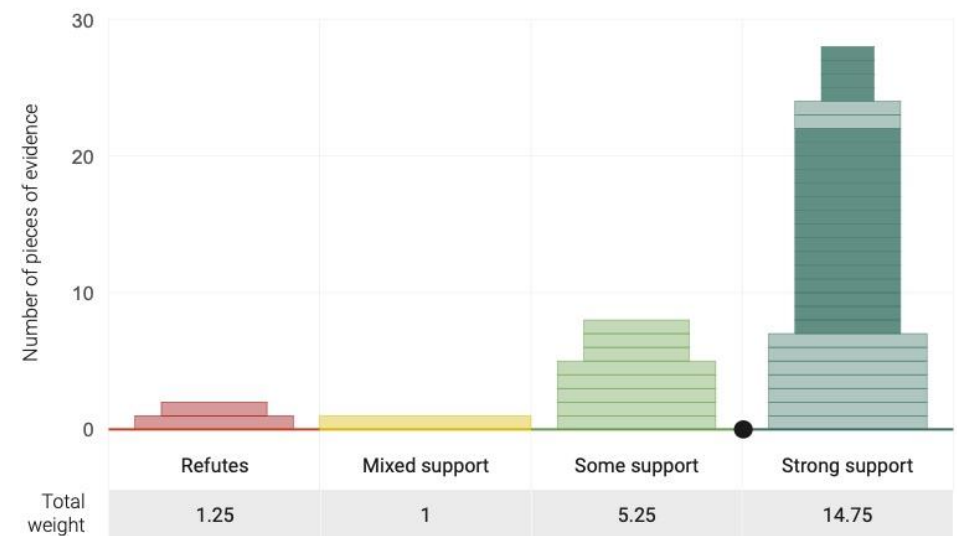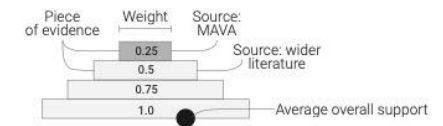## Are organisations that receive flexible funding more organisationally and financially sustainable?

Organisations use flexible funding to invest in organisational development and maturity   **++**

Organisations that receive flexible funding acquire additional funding and become financially sustainable   **+**

Does flexible funding increase the resilience of organisations and the likelihood of overcoming crises?

Flexible funding increases the resilience of organisations to overcome crises   **++**

In some cases, quick, non-bureaucratic funding is a necessary lifeline for organisations to remain operational   **++**

- refuted   ± mixed support   + some support   ++ strong support

Learning question A: Does flexible funding enable organisations to be more strategic and follow through with their programmatic work?

The evidence suggests that organisations receiving flexible funding are more likely to work strategically and implement their plans. A shift towards a greater proportion of flexible funding may lead to improved delivery by conservation organisations.

Assumption A1: Organisations that receive flexible funding have a higher likelihood of working strategically and of implementing what's planned

The data proposes that organisations receiving flexible funding are more likely to work strategically and implement their plans. Concerns about flexible funding leading to less efficient use of funds may be outweighed by the benefits those funds produce, though this may require further investigation. While a particular type of funding may be most useful for a particular purpose, a shift towards a greater proportion of flexible funding may lead to improved delivery and effectiveness of conservation organisations. Review the evidence used for this assumption in the evidence capture sheet.

Figure 26: Combined evidence from MAVA grants and wider literature.

Figure 27: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

We considered 39 pieces of evidence obtained from different sources to assess this assumption.

A targeted questionnaire sent to 75 MAVA grantees provided 19 answers that were used as evidence pieces. The questionnaire contained three questions relevant for this assumption:

1. If you had NOT received programmatic funding for your strategy/programme, what would have been different / what would have happened?
2. Now, considering you had received DOUBLE the MAVA funding for your strategy/programme, what would have been different? What could you have implemented that you couldn't with the funding you received?
3. What difference did the flexible funding make for your organisation compared to the project-specific funding from MAVA?

Furthermore, exploratory searches of the wider literature provided 20 pieces of evidence from nine sources. This is a relatively small number of sources. However, some unpublished, in-progress manuscripts offered preliminary results and suggested further reading. Discussions with one of the authors of these manuscripts confirmed that this is a novel and developing area of research. They also highlighted some additional sources that were searched for evidence.

Evidence assessment

On balance, the evidence from MAVA questionnaires and the wider literature provides some to strong support for the assumption (Figure 26). Evidence showing strong support was found more frequently in MAVA questionnaires than in wider literature (Figure 27).

Focus on the mission

The evidence highlighted several ways that flexible funding allowed organisations to deliver more and be more strategic. For example:

- The ability to hire new staff and restructure departments
- The freedom and flexibility to be fast and adaptive
- The ability to maintain independence and be critical of governments/companies
- The potential to bridge the gap between conception and implementation of new ideas.
- Reduced pressure to align with the funder's agenda and the ability to focus more on their mission.

"Before we received programmatic support, we were trapped into project-based funding. The move to programmatic funding helped us in various aspects: We were able to invest some of our resources in organisational development. If you are fully dependent on project-based funding, you usually need to invest your funds into project activities, especially if donors request own contributions." (MAVA, 2022)

Working strategically

Most questionnaire responses from MAVA grantees suggested that flexible funding allowed them to work strategically by designing a strategy/plan, implementing planned action, and increasing the scale of their efforts.

"Furthermore, the programmatic support helped us overcome a saving logic and to apply an investment logic. According to our experience, many/most smaller NGOs, especially if they are funded by project-based support [...] try to save as much of the funding and prolong project periods etc. This leads to slower processes and reduced impact, [...] the programmatic support helped us to increase our impact significantly." (MAVA, 2022)

Finding the balance

Many also stated that by doubling the funding, they could have gone above and beyond what was planned. For example:

- Increase their conservation impact
- Move staff to full-time work
- Develop their best practices
- Spend more time collaborating with other actors

Two grantees raised some concerns about doubling flexible funds, with one suggesting it may lead to budgetary imbalances and a need to adjust their structure and processes.

"In our specific case, doubling the programmatic support might not only have positive effects. The growth might have gone too fast, and also, the ratio of programmatic support and our total budget was in a good balance, so we were not too dependent on MAVA funding. At a certain point, core funding would have been much more helpful than a further increase in programmatic support."
(MAVA, 2022)

From the small amount of evidence that refuted the assumption, one source suggested that enhanced financial flexibility can reduce cost efficiency. A further source provided mixed support, suggesting that particular funding sources are useful for particular purposes.

Learning question B: Are organisations that receive flexible funding more organisationally and financially sustainable?

The evidence suggests that organisations often use flexible funds to invest in organisational development and maturity. In some cases, unrestricted funds are also used to acquire additional funding. Further investigation is needed to determine whether this consistently leads to greater financial sustainability.

Assumption B1: Organisations use flexible funding to invest in organisational development and maturity

The evidence suggests that organisations often use flexible funding to invest in organisational development and maturity. Funding sources often focus on specific activities and rarely on organisational development. The inability of many conservation non-profits to fund organisational development may have detrimental impacts on their delivery of effective conservation.

Unlike other donors, MAVA strategically invested in the development of key partner organisations. For more information about that, we recommend the learning product Tips of the Triangle.

Review the evidence used for this assumption in the evidence capture sheet.
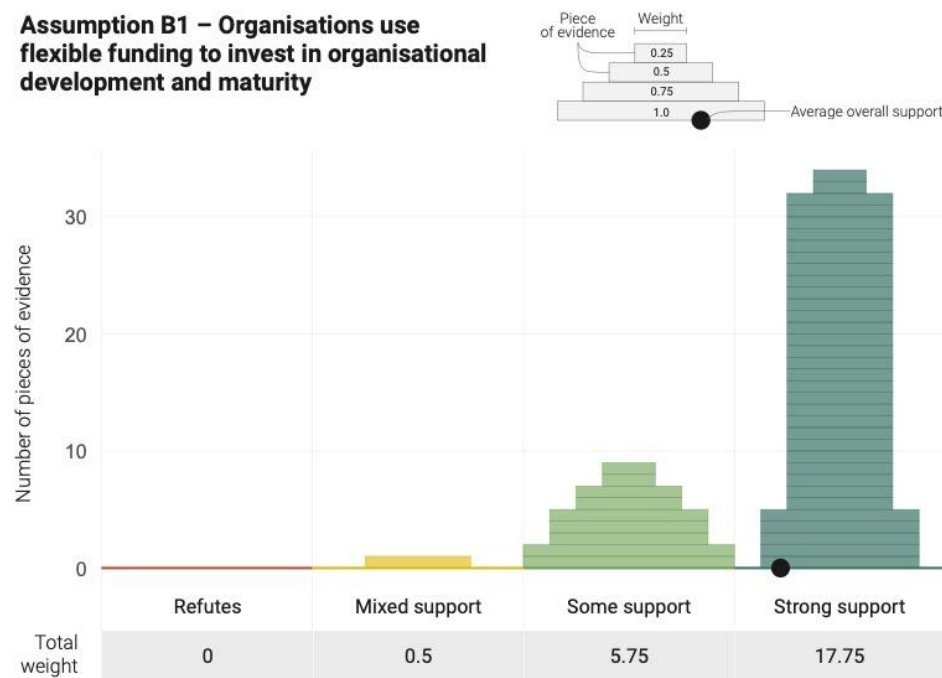
Figure 28: Combined evidence from MAVA grants and wider literature.
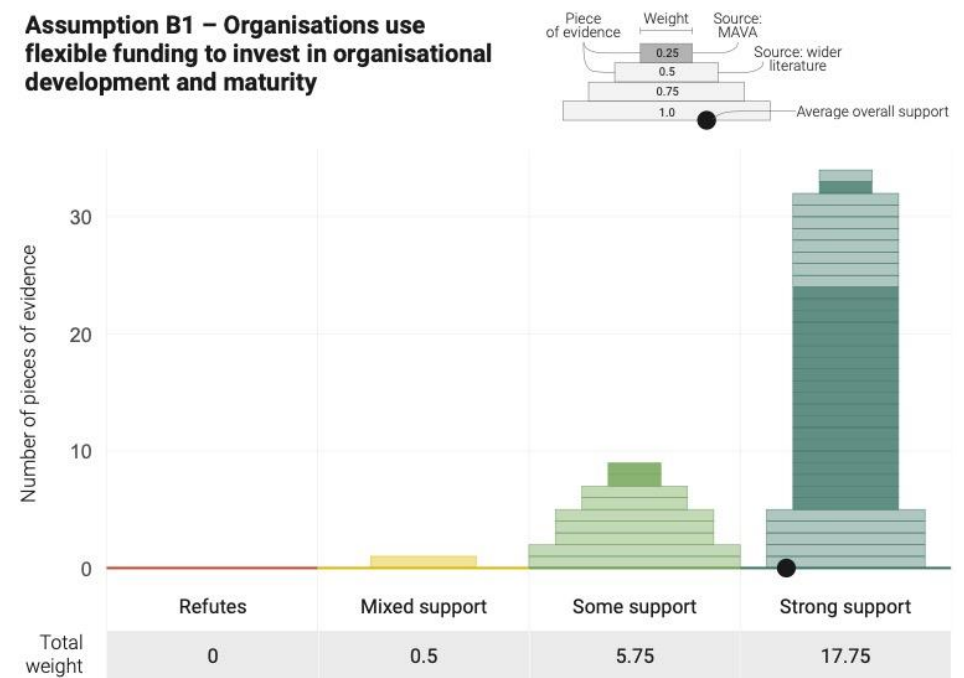
Figure 29: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

To assess this assumption, we considered 44 pieces of evidence obtained from different sources.

A targeted questionnaire sent to 75 MAVA grantees provided 22 answers that were used as evidence pieces. The questionnaire contained two questions relevant to this assumption:

1. What would have happened if you had NOT received core funding from MAVA? What could you not have done? Where would your organisation stand today?
2. Now consider if you had received DOUBLE the amount of funding from MAVA: what difference would that have made?

In addition, exploratory searches of the wider literature provided 22 pieces of evidence from 10 sources. Searches returned relatively few sources, though some unpublished, in-progress manuscripts offered preliminary results and suggested further reading. Discussions with one of the authors of these manuscripts confirmed that this is a novel and developing area of research. They also highlighted some additional sources that were searched for evidence.

Evidence assessment

On balance, the evidence from MAVA questionnaires and the wider literature provides strong support for the assumption (Figure 28). Evidence showing strong support was found more frequently in MAVA questionnaires than in wider literature (Figure 29).

Examples from the wider literature where flexible funding was used to invest in organisational development and maturity included:

- hiring, retaining and developing staff
- strengthening key institutions
- leadership pipelines, building networks and collaborations
- the opportunity to try new things
- and the ability to implement long-term projects and those with no clear end date (e.g. lobbying)

Responses from MAVA grantees highlighted similar themes. Those that used funding for organisational development cited spending on improving administration, hiring staff, reporting, fundraising, communications, and capacity building and training. Grantees also highlighted the challenge they face in finding money for organisational development.

One grantee raised the concern that a large pot of core funding could lead to an unbalanced budget, with implications for organisational structure and processes.

One study made the case that flexible funding can sometimes be just as limiting as more restricted sources. The study suggests that avoiding heavy reliance on only one type of funding (restricted or unrestricted) may be beneficial.

Assumption B2: Organisations that receive flexible funding acquire additional funding and become financially sustainable

The data shows that in some cases, recipients of flexible funding can acquire additional funds. This seems to be the case in particular for MAVA grantees. More widely, there is a general lack of evidence available to test this assumption, and further research may provide significant opportunities for learning.

Review the evidence used for this assumption in the evidence capture sheet.
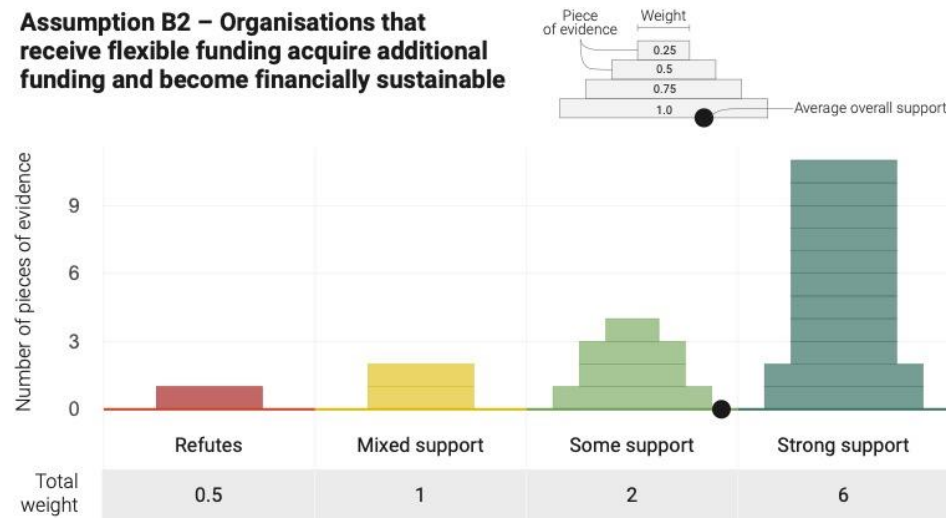
Figure 30: Combined evidence from MAVA grants and wider literature.
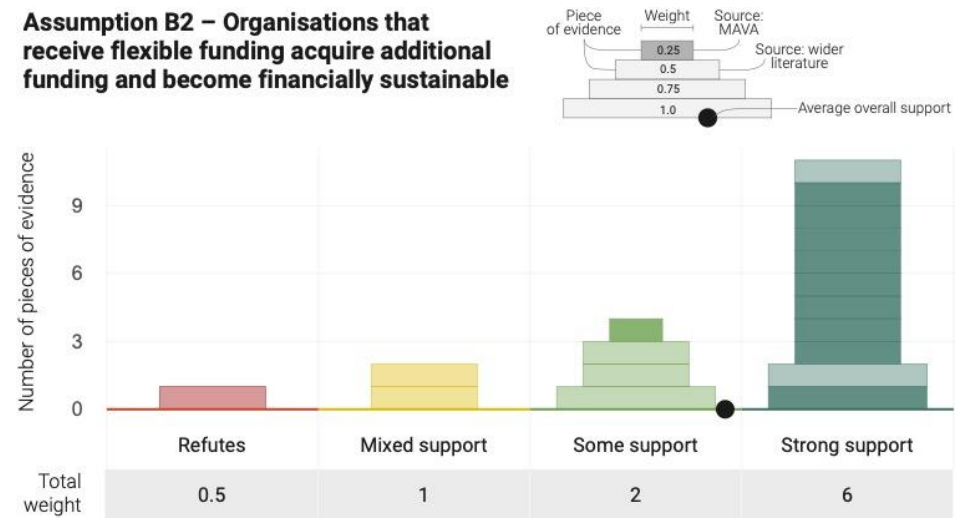
Figure 31: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

To assess this assumption, we considered 18 pieces of evidence obtained from different sources.

A targeted questionnaire was sent to 75 MAVA grantees. The questionnaire contained two questions relevant to this assumption:

1. Did the funding provided by MAVA help you acquire other funding?
2. If the funding provided by MAVA helped you acquire other funding, was the amount comparable to the MAVA funding?

All quantifiable responses to Question 1 were combined into a single piece of evidence. Nine answers to Question 2 that provided interesting contextual information related to raising additional funds were also considered relevant evidence.

Exploratory searches of the wider literature provided eight pieces of evidence from three sources. Searches returned relatively few sources, though some unpublished, in-progress manuscripts offered some primary results and suggested further reading. Discussions with one of the authors of these manuscripts confirmed that this is a novel and developing area of research. They also highlighted some additional sources of evidence.

Evidence assessment

On balance, the evidence from MAVA questionnaires and the wider literature provides some support for the assumption (Figure 30). Evidence showing strong support was found more frequently in MAVA questionnaires than in wider literature (Figure 31).

Evidence from MAVA grantees strongly supported this assumption. For grantees that received flexible funding, 23 of 26 reported that it helped them acquire additional funds. Furthermore, 16 of those grantees acquired additional funds of equal size or superior to the funding received from MAVA.

Other responses from MAVA grantees highlighted that time and money for fundraising is crucial. Flexible funding allowed grantees to invest more resources in further fundraising.

> *"[Flexible] funding allows for more fundraising and therefore to become less dependent on project base funding." (MAVA, 2022)*

> *"The core funding from MAVA allowed us to hire a colleague to focus on operations and communications, and thus to free up time of our director for fundraising and organisational development. This allowed us to further expand our funding, our team and thus, ultimately, the reach of our programs." (MAVA, 2022)*

With MAVA's closing in sight, MAVA's partners have actively tried to generate new funding sources. Where possible and appropriate, MAVA has provided support for these efforts. That could be a reason for the strong support for this assumption from evidence inside the MAVA domain.

If you are curious about MAVA's role as an "engaged donor", please refer to one of the foundation's learning products: Be an Octopus! Reflections from an engaged donor.

Evidence from the wider literature was more mixed, though one study found that recipients of flexible funding had favourable financial positions across several measures. Another benefit was the potential to use flexible funds for matching funds, which allows tipping into other sources of funding.

The theme of **investing more in fundraising** also emerged in the wider literature[12] [14] *, along with the ability to retain **in-house knowledge**[17] **of potential funding** sources. While some sources suggested that more flexible funds were important for sustainability of grantee organisations[19], others raised the concern that receiving large pots of flexible funding could have the unintended consequence of deterring other funders[16].

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* The number in superscript represents an evidence piece that was used to test the assumption. Each number links to the corresponding row in the evidence capture sheet.

Learning question C: Does flexible funding increase the resilience of organisations and the likelihood of overcoming crises?

Some evidence suggests that flexible funding can play a role in increasing the resilience of non-profit organisations. In addition, quick, non-bureaucratic funding may be an essential lifeline during times of crisis.

Assumption C1: Flexible funding increases the resilience of organisations to overcome crises

While a general lack of evidence rules out any strong conclusions, there is some support for the assumption that flexible funding can help organisations in times of crisis. The COVID-19 pandemic has brought this discussion into sharp relief. There may be a strong case for more exploration of the potential for flexible funding to increase the resilience of the non-profit sector.

Review the evidence used for this assumption in the evidence capture sheet.

Figure 32: Combined evidence from MAVA grants and wider literature.

Figure 33: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

To assess this assumption, we considered 15 pieces of evidence obtained from different sources.

A targeted questionnaire sent to 75 MAVA grantees provided six answers that were used as evidence pieces. The questionnaire contained one question relevant to this assumption:

- If you received flexible funding during the COVID-19 crisis, did it help to overcome the crisis?

Exploratory searches of the wider literature provided eight pieces of evidence from two sources. That is a relatively small number of sources. However, some unpublished, in-progress manuscripts offered some primary results and suggested further reading. Discussions with one of the authors of these manuscripts confirmed that this is a novel and developing area of research. They also highlighted some additional sources of evidence.

Evidence assessment

On balance, the limited available evidence from MAVA questionnaires and the wider literature provides some support for the assumption (Figure 32, Figure 33).

All six MAVA grantee responses confirmed that the flexible funding received during the pandemic helped them to overcome that crisis. The funding was used for a range of things, including filling financial gaps created by the crisis; ensuring fundraising could continue; helping with HR; and shifting the focus to capacity building while field activities were prohibited.

Out of the 35 MAVA partners that received continuous flexible funding for their programmatic work or to cover their core costs, only 5 required emergency funding to deal with the COVID-19 pandemic. This seems to indicate that organisations receiving a form of ongoing flexible support have a high level of resilience and a high likelihood of overcoming unforeseen challenges.

Very little evidence was found in the wider literature. However, some themes that were highlighted were:

- retaining in-house knowledge and experience[9];
- stability in the face of "hits"[11] or unpredictable situations[15]; and
- keeping financial reserves for difficult times[12].

Another interesting theme was the ability to respond to crises within the communities that grantees support[13].

Assumption C2: In some cases, quick, non-bureaucratic funding is a necessary lifeline for organisations to remain operational

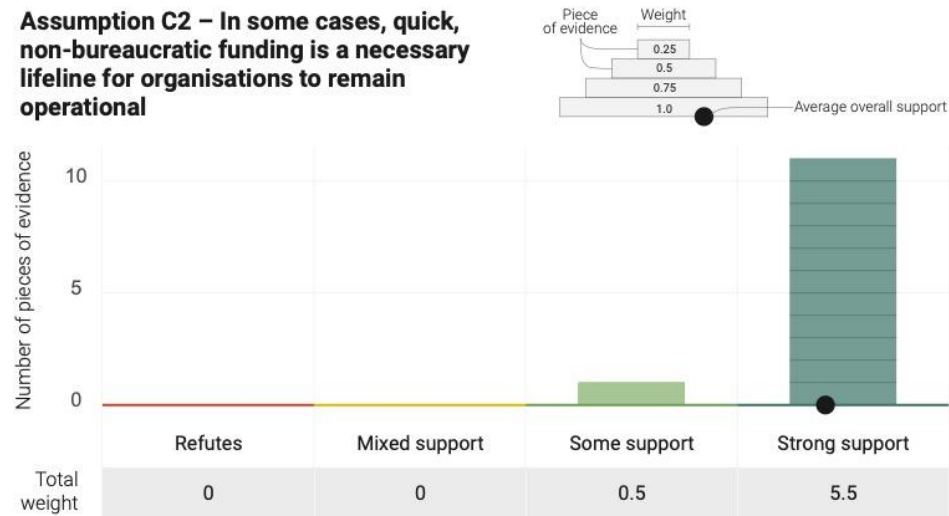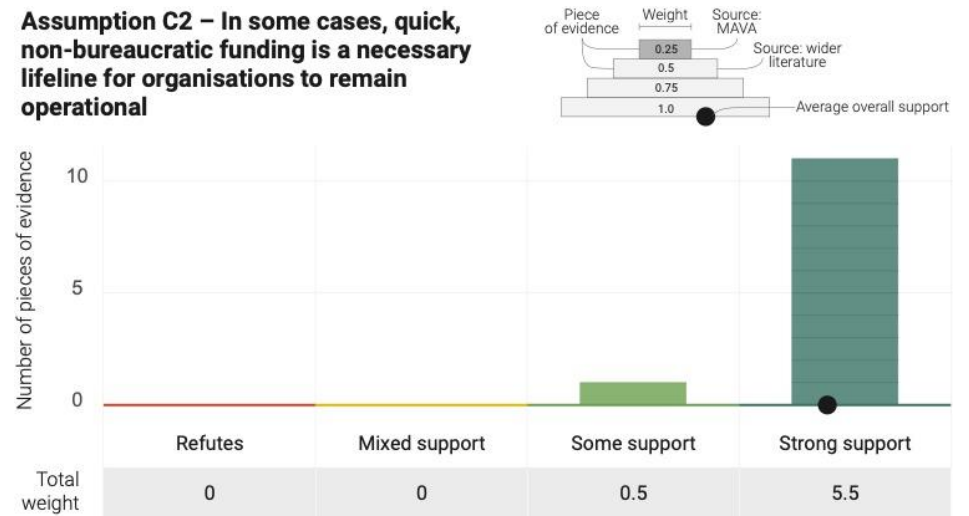Emergency funding helped MAVA partners to overcome the COVID-19 crisis. Further research on this topic may provide significant opportunities for learning.

Review the evidence used for this assumption in the evidence capture sheet.

Figure 34: Combined evidence from MAVA grants and wider literature.

Figure 35: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

To assess this assumption, we considered 12 pieces of evidence obtained from different sources.

A targeted questionnaire sent to 75 MAVA grantees provided 12 answers that were used as evidence pieces. The questionnaire contained one question relevant to this assumption:

- If you had NOT received Emergency funding from MAVA, what would have happened with your organisation or your conservation work?

No evidence was found in the wider literature.

Evidence assessment

Evidence from MAVA questionnaires strongly supported the assumption (Figure 34, Figure 35).

MAVA grantees reported that emergency funding helped them overcome a crisis situation by avoiding making redundancies, going bankrupt, and shutting down at least some project activities. Grantees also used funding to increase their fundraising efforts.

"We were able to compensate the reduction of donations caused by our inability to travel and fundraise in person in developing countries." (MAVA, 2022)

"The Emergency funding from MAVA has been life-saving. It gave us financial and human resources to finalise our project [...]. This work is the result of 10 years of important marine work. It is a crucial synthesis [report]." (MAVA, 2022)

"We would have to make a reduction in staff and perhaps lose some colleagues who were very well-trained and devoted to their work as their everyday passion" (MAVA, 2022)

"Emergency support from MAVA allowed us to keep a small but steady increase in unrestricted funds. If we hadn't received the emergency funding, we would have lost one or two core staff and prevented from recruiting 968 new members in 2020 and 2021. These new members represent 100 thousand euro in member fees, donations, and purchases in the shop and program activities. This money is very important for core business and project matching funds." (MAVA, 2022)

RESEARCH AND MONITORING

Key findings:

Using relevant research findings to guide action seems to lead to improved conservation outcomes. There is still a way to go before this is standard practice across the conservation sector. (see [learning question A](#))

Conservation initiatives focusing on research and practice tend to invest in research that can guide practice. Research in conservation science is often poorly aligned with conservation priorities. (see [learning question B](#))

OVERVIEW OF THE LEARNING TOPIC

Many conservation organisations do basic research and monitoring. There are numerous reasons why research and monitoring are necessary. Teams frequently feel they need further information to take management decisions. Data on the particular conservation context, the status of conservation targets, the threats, or the implementation of activities are considered most relevant. The logic is: the more we know, the better our decisions.

With the Conservation Standards (CS), the conservation community has established a common practice of adaptive conservation management based on the best available knowledge. The CS also help teams collect the correct data for relevant decisions in the respective conservation context.

However, many teams still struggle. Knowing more is always better. So, where to draw the line? How much research and monitoring effort is sufficient to inform conservation management decisions? How much data is required to ensure intelligent decisions and more conservation impact? That is what we wanted to find out in this learning topic.

LEARNING QUESTIONS AND ASSUMPTIONS

A core assumption of any research and monitoring strategy is that its efforts build on previously identified information needs. This ensures that research and monitoring are focused on answering critical management questions.

Then suppose the right people can access research and monitoring results at the right time and in a suitable format. In that case, research recommendations can inform good conservation practices.

Over time, data collection during implementation of conservation strategies is crucial to identify more information and research needs and helps establish or improve data libraries that facilitate access to evidence.

Our ambition with this learning topic was to dig into some crucial questions around research and monitoring (Figure 36):

- **Does research improve conservation practice** and help achieve outcomes and impact? (see learning question A)
- **How much research is sufficient** for well-founded management decisions and successful conservation initiatives? (see learning question B)
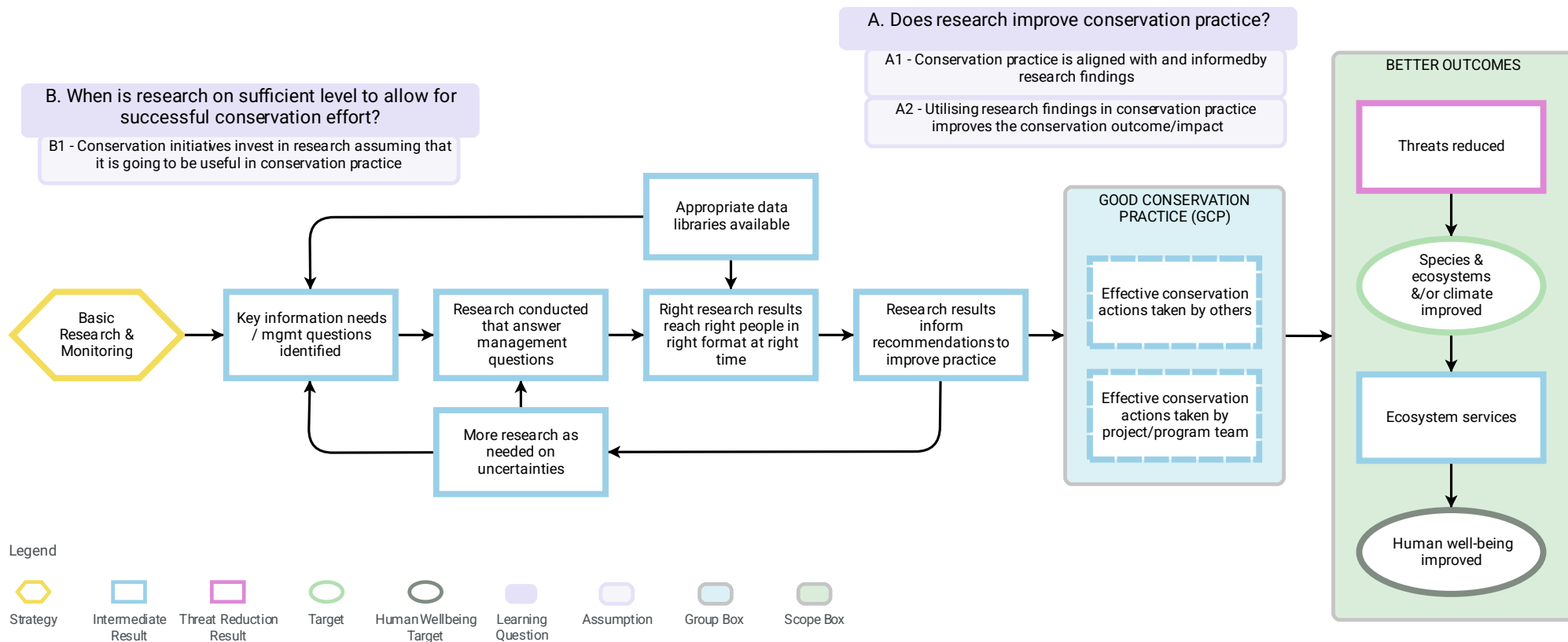
A. Does research improve conservation practice?

A1 - Conservation practice is aligned with and informed by research findings

A2 - Utilising research findings in conservation practice improves the conservation outcome/impact

B. When is research on sufficient level to allow for successful conservation effort?

B1 - Conservation initiatives invest in research assuming that it is going to be useful in conservation practice

BETTER OUTCOMES

Threats reduced

Species & ecosystems &/or climate improved

Ecosystem services

Human well-being improved

GOOD CONSERVATION PRACTICE (GCP)

Effective conservation actions taken by others

Effective conservation actions taken by project/program team

Basic Research & Monitoring

Key information needs / mgmt questions identified

Research conducted that answer management questions

Appropriate data libraries available

Right research results reach right people in right format at right time

Research results inform recommendations to improve practice

More research as needed on uncertainties

Legend

Strategy — Intermediate Result — Threat Reduction Result — Target — Human Wellbeing Target — Learning Question — Assumption — Group Box — Scope Box

Figure 36: The theory of change, learning questions, and assumptions for the learning topic Research and monitoring. Note that the darker purple boxes contain the learning questions. The light purple boxes show the associated assumptions. This theory of change with learning questions and assumptions has been developed using Miradi Share. You can access this theory of change directly on the Conservation Actions and Measures Library (CAML).

EVIDENCE AND LEARNING

The figure below shows an overview of the main findings. Note that these summary ratings do not represent uncertainty and level of confidence in the evidence appropriately. For the full picture, please review the evidence base and assessment for each assumption.

LEARNING QUESTION / ASSUMPTION   FINDINGS

Does research improve conservation practice?

Conservation practice is aligned with and informed by research findings

Utilising research findings in conservation practice improves the conservation outcome/impact

When is research on sufficient level to allow for successful conservation effort?

Conservation initiatives invest in research assuming that it is going to be useful in conservation practice

- refuted   ± mixed support   + some support   ++ strong support

Learning question A: Does research improve conservation practice?

Using relevant research findings to guide action seems to lead to improved conservation outcomes. There is still a way to go before this is standard practice across the conservation sector.

In some cases, evidence is available but is not routinely used. In other cases, relevant evidence either does not exist or is not available in a helpful format for potential users. Initiatives that integrate research with conservation may be particularly well-placed to align their practice with their research findings, especially where there are resources available for rigorously assessing conservation outcomes.

Assumption A1: Conservation practice is aligned with and informed by research findings

The evidence presents a mixed view of how well conservation practice is aligned with research findings. Two competing narratives emerged from the wider literature:

1. that a lack of relevant and accessible research is seriously limiting the ability of conservation managers and decision-makers to make use of research findings; and
2. that despite a growing body of conservation-focused research, practitioners and decision-makers are still routinely not using evidence, including evidence from research.

Both of these narratives are at odds with the reports of MAVA grantees, which indicate (albeit from a sample that is potentially not representative of the sector) that research and practice were well aligned. While there seems to be broad agreement that conservation action can be improved by aligning with research findings, there is still a way to go to achieve this aim.

Review the evidence used for this assumption in the evidence capture sheet.
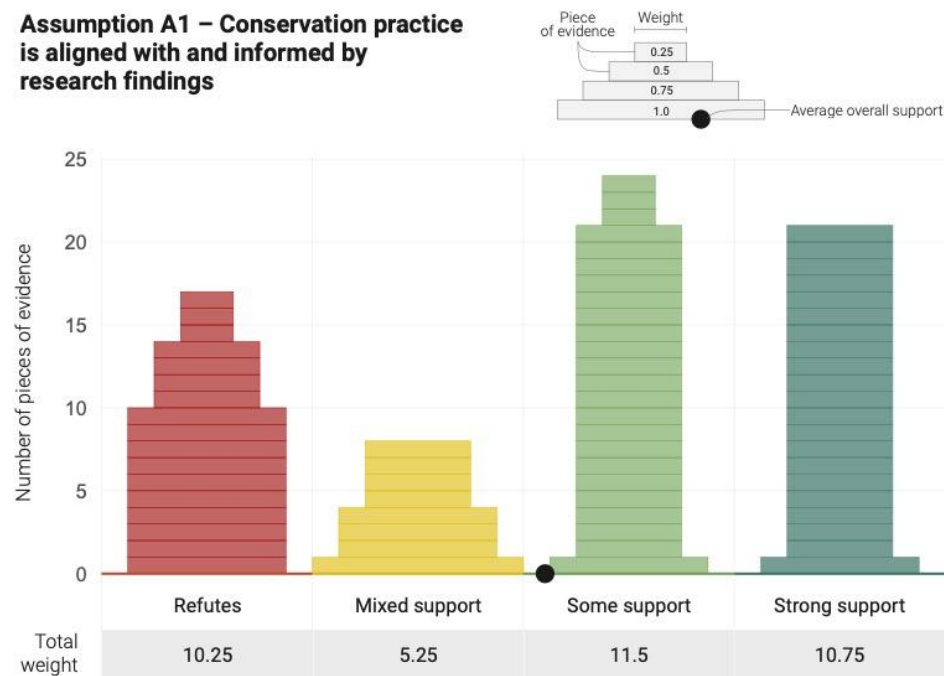
Figure 37: Combined evidence from MAVA grants and wider literature.
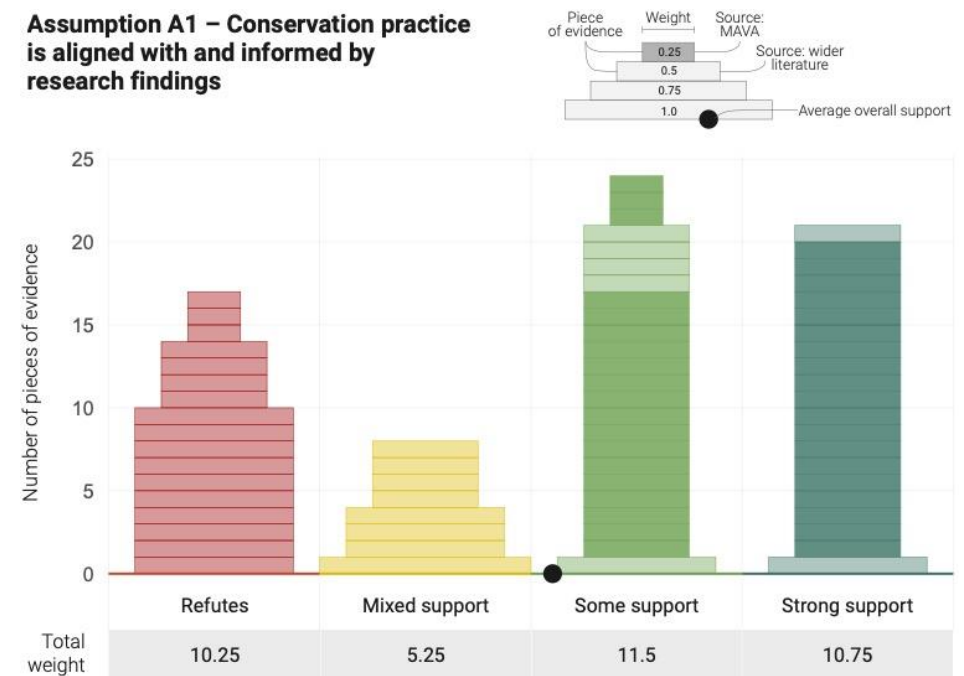
Figure 38: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

We considered 70 pieces of evidence obtained from different sources to assess this assumption.

An in-depth search of the MAVA grants database provided 38 pieces of evidence from 32 sources that were used to test this assumption. An initial review highlighted 122 grants that were relevant to the topic of basic research and monitoring. These were further screened, and 49 grants that integrated research and conservation practice were retained. Documentation – including progress reports, final reports, technical reports, and MAVA evaluations – was searched in detail for statements or claims that linked conservation practice with research findings.

Exploratory searches of the wider literature found 32 pieces of evidence from 26 sources. Many of these sources were large-scale assessments aimed at detecting links between research efforts and conservation priorities, biases in research effort, or a prevalence of evidence use within particular sectors or disciplines.

Evidence assessment

Overall, the evidence neither supports nor refutes the assumption (Figure 37). Evidence supporting the assumption was found more often in the MAVA grant database. In contrast, evidence refuting the assumption was found more often in the wider literature (Figure 38).

Evidence from the wider literature suggests that conservation practice is frequently not aligned with broader research findings. The problem can be expressed through several scenarios:

1. technical guidance or best practices are available but not followed when actions are implemented on the ground[46, 55, 61] *;
2. guidance or best practices are followed, but monitoring is inadequate for assessing outcomes[52, 61];
3. guidance or best practices are not developed using the findings of relevant research[62, 64, 66], with some measures being ineffective or even harmful[40];
4. relevant evidence for particular actions, locations, or contexts either does not exist, or is not available in a useful format[59, 71].

More broadly, many authors have highlighted a "science-practice" gap in the field of conservation[41]. There are problems at all stages, from knowledge generation to knowledge communication and knowledge use[63].

Several other sources present a more mixed view. For example, one study suggests that businesses may seek to align their biodiversity initiatives with the available evidence[48]. But they rely on best practices, certifications, and guidance rather than directly engaging with the research[49]. Another study found that conservation managers often sought research to guide their decision-making.

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* The number in superscript represents an evidence piece that was used to test the assumption. Each number links to the corresponding row in the evidence capture sheet.

Still, managers suggested that a lack of relevant and applicable evidence sources was a severe limitation[59].

Other studies presented a broad conception of the types of evidence that were used to support conservation action plans. The sources included published studies, experience, expert and in-house knowledge, and indigenous and local knowledge. However, the studies still found that around a quarter of the claims in management plans were unsupported by any source of evidence[71].

In contrast to the wider literature, MAVA grantee reports highlight a number of cases where research and practice were well aligned.

"The data produced during the first phase of the project has been analysed and used to edit the first National Action Plan (PAN) project for all the islands [...]." (MAVA-G14, 2019)

Even within MAVA grants, there was sometimes a lack of clear information to link research and practice.

Two sources of potential bias for the MAVA grant reports are worth highlighting. Firstly, grants were initially screened to include only those that integrated research and conservation practice. Therefore, the grants selected for detailed review were the most likely to align their actions with their research findings.

The second and more general source of bias is that grantees may be more likely to report cases in which they have applied their research findings, but less likely to report when research findings were not used or when the research was unhelpful for guiding action. Similar biases for positive reporting have been discussed in the broader conservation literature.

Assumption A2: Utilising research findings in conservation practice improves the conservation outcome/impact

Based on the limited available evidence, there is some support for the assumption that using research findings can improve conservation outcomes. For projects that integrate research and action, assessing how the use of research findings influenced conservation outcomes is a significant challenge, particularly over the typically short timescales of grant funding.

To progress on this issue, conservation project proposals should articulate how their intended actions will achieve the desired outcomes. They should refer to best available evidence to support any claims, and investment should ideally span a period long enough that impacts can be rigorously assessed.

Review the evidence used for this assumption in the evidence capture sheet.
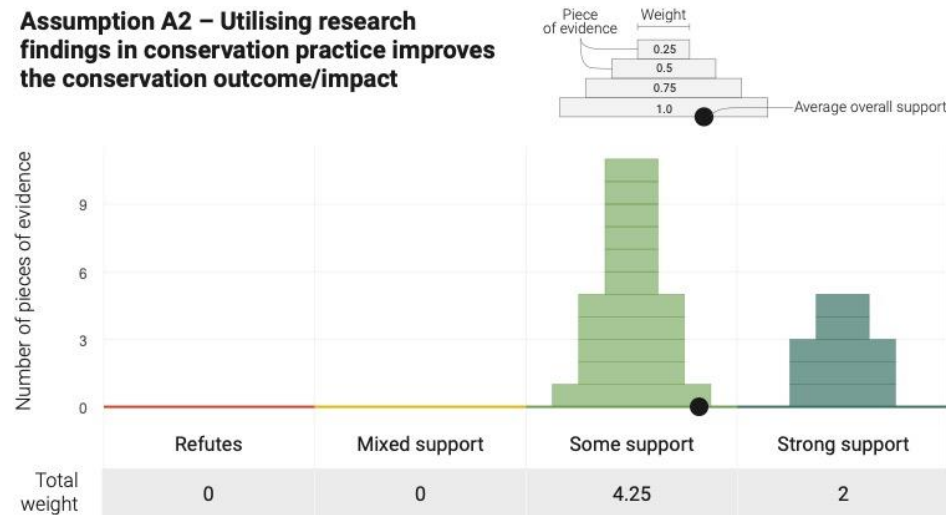
Figure 39: Combined evidence from MAVA grants and wider literature.
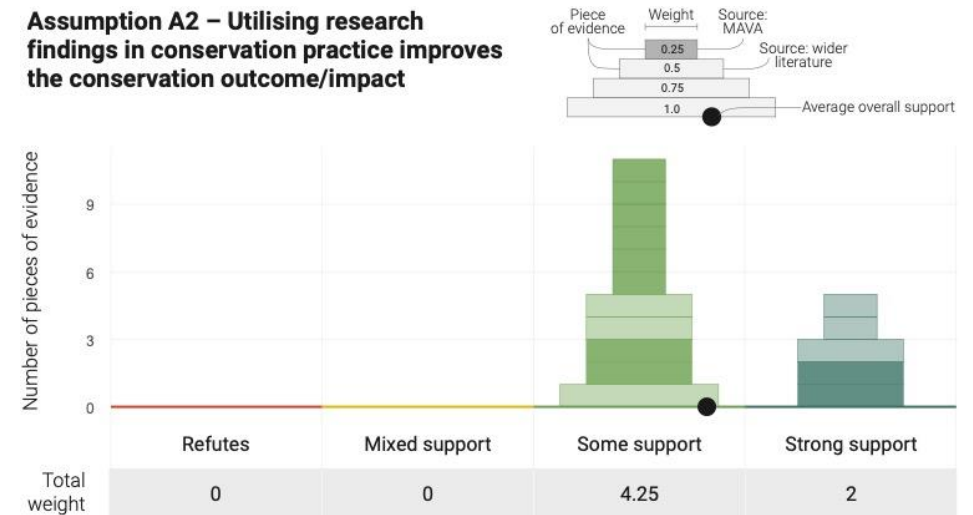
Figure 40: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

Evidence base

To assess this assumption, we considered 16 pieces of evidence obtained from different sources.

An in-depth search of the MAVA grants database provided ten pieces of evidence from 49 sources that were used to test this assumption. An initial review highlighted 122 grants that were relevant to the topic of basic research and monitoring. These were further screened, and only grants that integrated research and conservation practice were retained. Documentation – including progress reports, final reports, technical reports, and MAVA evaluations – was searched in detail for statements or claims that linked research findings with conservation outcomes.

Exploratory searches of the wider literature found six pieces of evidence from five sources. Only a few studies were found that directly addressed this assumption, particularly within the conservation sector.

Evidence assessment

The small amount of evidence that was found provides some support for the assumption (Figure 39).

Overall, evidence from the MAVA grants database provided some support for the assumption (Figure 40). However, there was no evidence of direct link between the use of research findings and improved conservation outcomes. For example, one of the strongest pieces of evidence reported strengthened protection for key habitats and species but stopped short of assessing whether this resulted in improved status or a reduction in threats:

"The policy work (using the research findings) resulted in a significant increase in protected island wetlands. Out of 805 wetlands (mapped), 565 (70%) are now under protection with a strict legal framework. The policy work succeeded in the incorporation of the project's scientific documentation into the [...] legislative framework." (MAVA-G22, 2013)

The ability to assess impacts on conservation status or threats may be limited by the short timeframe of most grants, which is typically three years.

The evidence from the wider literature also provided some support for the assumption, although there are not many relevant studies (Figure 40). The most compelling case was a hospital that found better patient outcomes in an evidence-based unit compared to a standard practice unit[11]. Other studies found improved outcomes for some restoration projects[14, 15] and certification schemes[16] when research findings were used to guide practice.

Learning question B: When is research on sufficient level to allow for successful conservation effort?

Some conservation initiatives invest strategically in research so that it can guide their decisions and practice. More broadly, however, the research effort within conservation science is often poorly aligned with conservation priorities.

Assumption B1: Conservation initiatives invest in research assuming that it is going to be useful in conservation practice
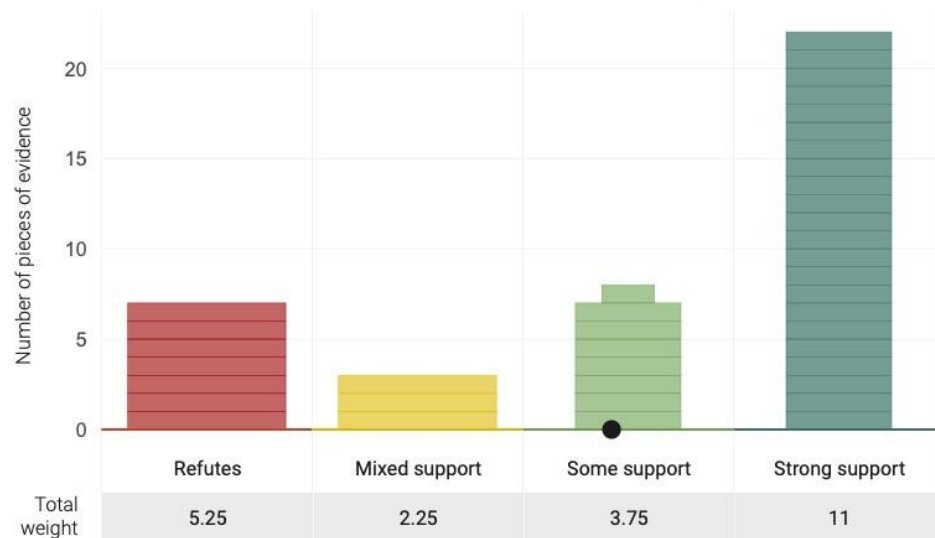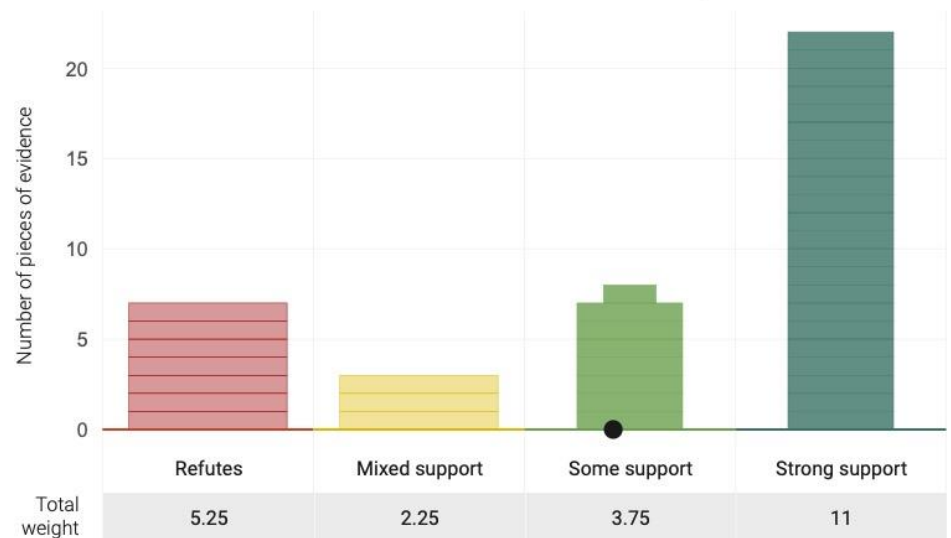
Many conservation initiatives clearly show good intentions regarding using research findings in guiding conservation action. However, within the wider field of conservation science, research effort seems to be poorly aligned with conservation priorities. Simply describing the state of nature and critical threats is not sufficient to deliver on biodiversity conservation. Greater efforts must be directed toward delivering solutions for the most pressing conservation challenges.

Review the evidence used for this assumption in the evidence capture sheet.

Figure 41: Combined evidence from MAVA grants and wider literature.

Figure 42: Evidence separated by source. Dark blocks represent MAVA sources, light blocks are from wider literature.

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Evidence base

We considered 40 pieces of evidence obtained from different sources to assess this assumption.

An in-depth search of the MAVA grants database provided 30 pieces of evidence from 38 sources that were used to test this assumption. An initial review highlighted 140 grants that were relevant to the topic of basic research and monitoring. These were further screened, and only grants that integrated research and conservation practice, with conservation organisations as main implementers, were retained. Documentation – including full project proposals and evaluations of those proposals – was searched in detail for statements or claims about the intended use of research findings.

Exploratory searches of the wider literature found ten pieces of evidence from ten sources. Many of these sources were large-scale assessments aimed at detecting trends in conservation research or links between research effort and conservation priorities.

Evidence assessment

Overall, the evidence neither supports nor refutes the assumption (Figure 41). While evidence from the MAVA database provided some support, evidence from the wider literature tended to refute the assumption (Figure 42).

Evidence from the MAVA grant proposals highlighted that projects with an integrated research and conservation component intended to use their research findings to inform their action. For example:

"Strategy 1 will focus on conducting in-depth research (distribution, abundance, density, threats, etc.) as well as regular monitoring of the pilot sites to allow the parallel development of ecological studies and socio-economic values of seagrass ecosystems. The main findings will directly inform site management plans and conservation actions, as well as feed in to advocacy and raising awareness activities." (MAVA-G12, 2020)

All evidence from MAVA grant proposals supported the assumption, which may be explained in part by how the evidence was gathered. Only those grants with an integrated research and conservation component were searched in detail. It therefore follows that such projects will be very likely to propose a research component that will inform their later conservation action. Indeed, proposals that did not make that link explicit may not have been awarded funding.

Furthermore, proposals that were purely research-focused, with no on-the-ground conservation component, were not searched for evidence. It remains how useful the research suggested in these cases will have been for conservation practice.

The wider literature suggests that research and conservation priorities are often not well aligned. For example, most of the research effort has targeted other species and landscapes than the most threatened ones[31,33,36,37,39]. In addition, there are persistent biases in geography and taxonomy. These biases in research efforts may often be explained by a lack of funding and capacity, as well as logistical challenges.

However, another study suggests that despite some notable examples, conservation science as a whole has spent too much effort describing threats and status of species and habitats and too little time designing, implementing and testing the effectiveness of conservation responses[38].

About the initiative

The **MAVA Foundation** is a family foundation with the mission to conserve biodiversity for people and nature by funding, mobilising and strengthening its partners and the conservation community. Active from 1994 to 2022, it has supported conservation initiatives and partners working in the Mediterranean, Coastal West Africa, and Switzerland and on Sustainable Economy.

Foundations of Success seeks to improve the practice of conservation. It promotes the collection and use of evidence to learn and adapt. The organisation brings together practitioners to jointly formulate generic theories of change for widely used conservation actions. The **Conservation Actions and Measures Library (CAML)** gathers these theories of change.

Conservation Evidence gathers evidence on conservation actions through synthesising documented evidence and sharing evidence through the Conservation Evidence database. The aim is to give conservationists easy access to the latest and most relevant knowledge to support conservation policy and management decisions.

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ACKNOWLEDGEMENTS

JOIN THE LEARNING

With this starting point based on best available evidence, we hope to spark discussion and to invite practitioners and organisations to learn about key conservation strategies.

The work continues on the initiative website conservation-learning.org. If you are contemplating taking a similar approach for another strategy or would like to contribute with your evidence and insights, please contact us at info@conservation-learning.org

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WEB RESOURCES

- [Conservation Evidence Database](#) – Summaries of evidence from the scientific literature about the effects of conservation actions
- [Conservation Actions and Measures Library (CAML)](#) – An open-source library housing generic theories of change for conservation actions
- [Collaboration for Environmental Evidence (CEE)](#) – Seeks to promote and deliver evidence syntheses on issues of greatest concern to environmental policy and practice
- [MAVA Learning](#) – Practical insights of value to the community of funders as well as to the larger conservation community
- **Interactive theories of change** for the learning topics in the Conservation Actions and Measures Library (CAML) on Miradi Share:
  - [Capacity-building](#)
  - [Partnerships and alliances](#)
  - [Flexible funding](#)
  - [Research and monitoring](#)
- **Evidence capture sheets** with the collected evidence used to explore the learning topics:
  - [Capacity-building](#)
  - [Partnerships and alliances](#)
  - [Flexible funding](#)
  - [Research and monitoring](#)