A Pragmatic Approach to Assessing System Change

Highlights and Tips from Practice

Hans Posthumus, January 2022

Why use this pragmatic approach?

- **If you wish to understand the system** that you are targeting and to know what is changing, how and why.
- **If you wish to adapt system strategies** using relevant and up-to-date information about the system.
- **if you wish to integrate this** into your existing program management and results measurement system.

The "*Pragmatic Approach to Assessing System Change*" outlines a process that programs can apply to regularly and practically assess system change.

So what's new?

- **The system strategy table** that helps programs to operationalize their overall system strategy. It helps to bridge the gap between strategic vision and interventions.
- **The helicopter lens** that helps to assess and compare the current system state with the starting and desired system state and answers: what is changing, how and why?
- **The updated system strategy table** that helps programs to assess system changes and review their strategies by presenting all relevant information on one page.

Introduction   Why use this pragmatic approach?

Why this slide deck?

This slide-deck highlights the most critical elements and provides practical tips on how to start applying the pragmatic approach to:

- **develop system strategies**
- **apply the helicopter lens to assess changes**
- **review changes and revise system strategies**

The refinement of the approach as presented in this slide-deck arose during the development and testing of cases at the Advanced Workshop for Results Measurement for Private Sector Development November 2021.

See also the glossary on page 5

How to use this slide-deck?
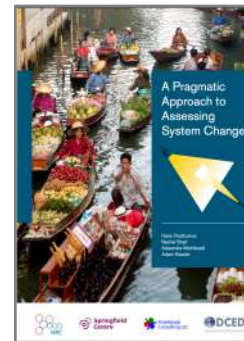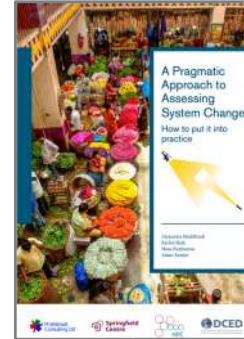
It is assumed that you are familiar with the 'overview paper'.

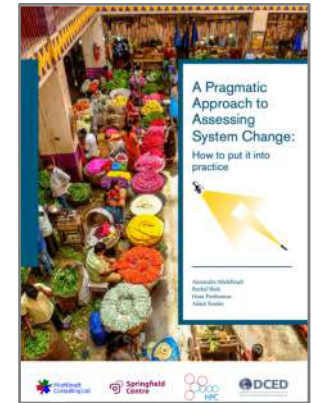*This paper uses the term 'system'. You may be used to 'sector' or 'market'. Terms may be used interchangeably.*

Reference is made to the 'how to put it into practice paper' where you will find more information on the approach and the cases we used.

Here you find the publications, related blogs and webinar links

Introduction   Why and how to use the slide-deck?   3

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Here you will find the tab for the sub topics

Here you find references to specific pages in the 'how to put it into practice paper'

Introduction

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Developing a strategy

Developing a strategy

Strategy development starts with:

Setting boundaries

Systems are complex. Systems are influenced by other systems. Systems are dynamic. Programs need to deal with that complexity. Programs need to be pragmatic and describe the system that they aim to change: *what does it look like*? That automatically implies setting boundaries: geographic boundaries and boundaries for supporting systems.

Setting boundaries helps programs to:
1. focus on key constraints and opportunities in the system
2. develop a concrete strategy to change the system
3. focus on assessing changes in the targeted system
4. use these assessments to review system strategies
5. focus communication on targeted and achieved changes

More information on page 12

Developing a strategy: Defining boundaries   6

Geographical boundaries

Be realistic. Will the program be able to change regional or national markets or will the program change the performance of the system in a selected number of provinces or districts only?

👍 Match ambition with realism.

It's unlikely that a program with limited resources that operates from one corner of the country will change an entire national system. For such a program there is no need to assess changes in the national system to investigate if those system changes are attributable to program interventions.
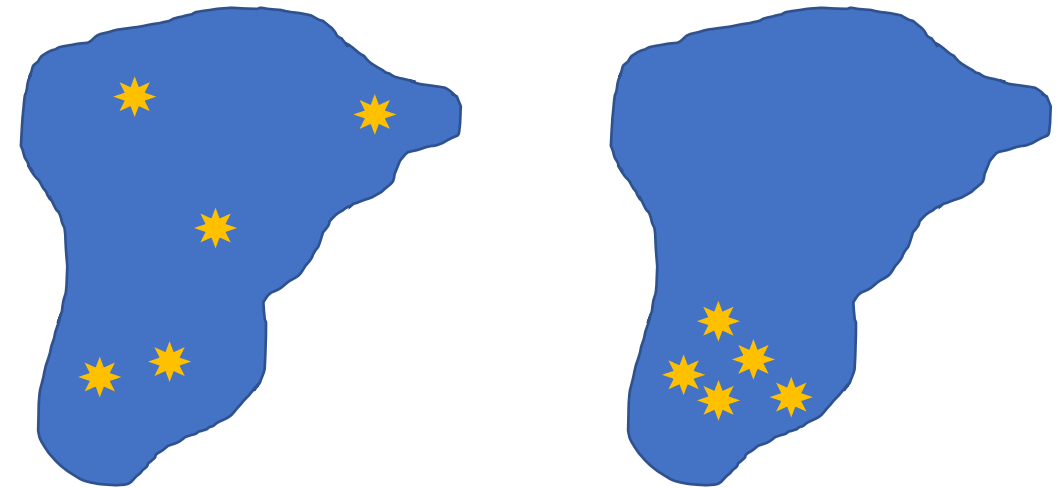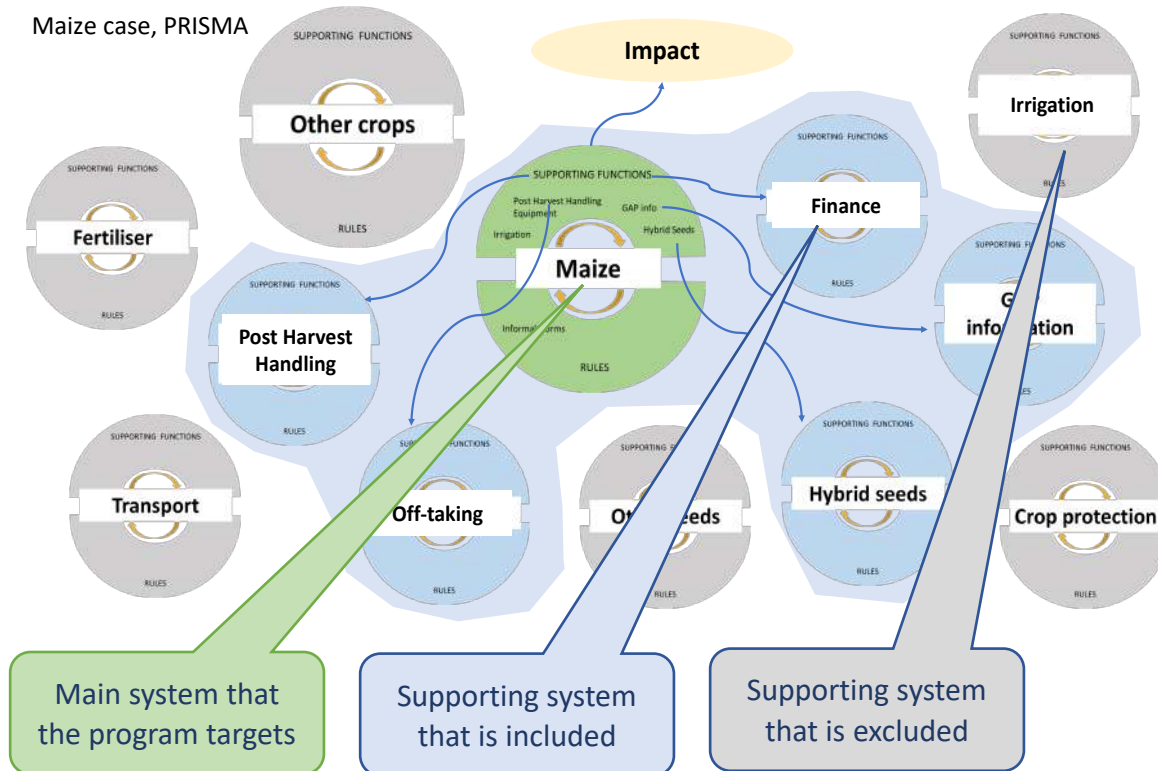
👎 No scattergun approach that dilutes resources

👍 Focus on the achievable and make a difference

Developing a strategy: Defining boundaries

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Supporting systems boundaries

To include or to exclude?

Maize case, PRISMA

Main system that the program targets
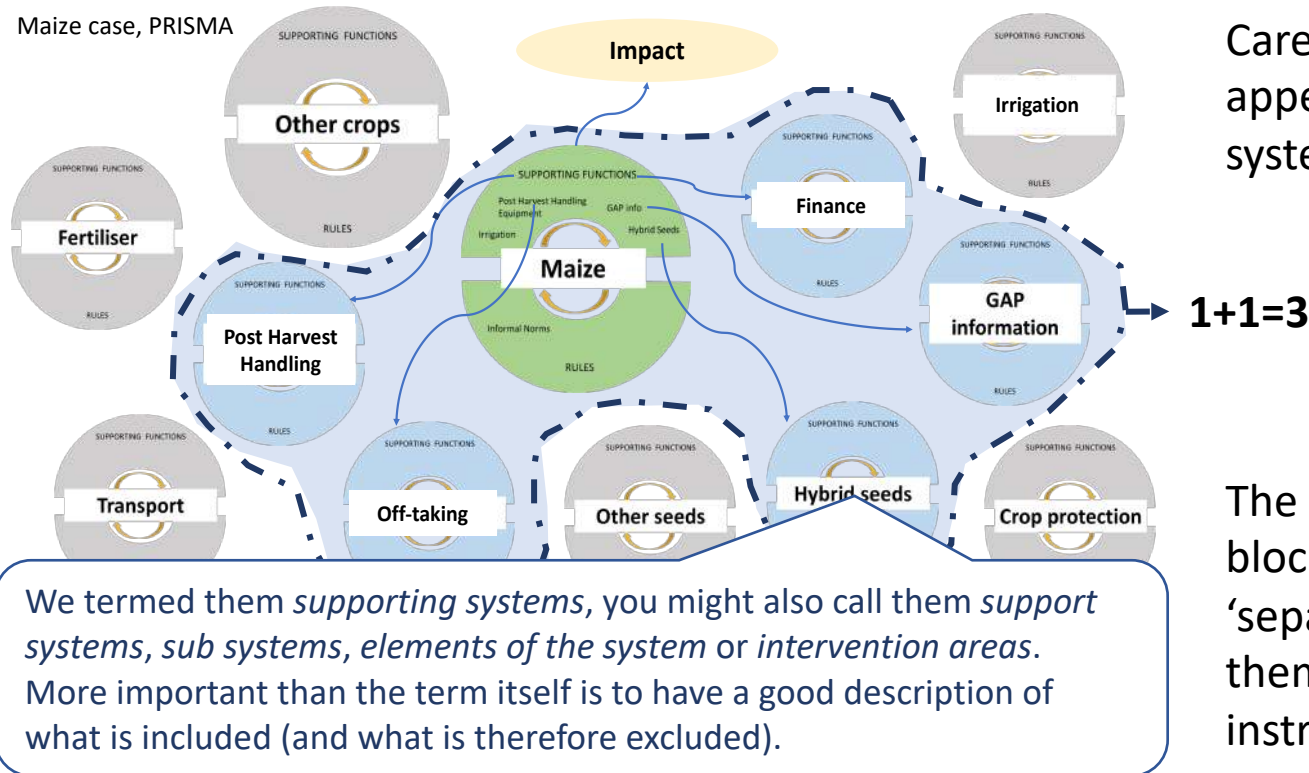
Supporting system that is included

Supporting system that is excluded

The decision to include or exclude supporting systems follows from the system diagnosis and is part of the system strategy development process.

Which supporting systems hamper the growth and performance of the main system? Are there opportunities for change in that support system? Which support systems have most potential to influence the main system? Will we be able to make a difference?

The more thorough the analyses of constraints and opportunities, the easier the strategy development process becomes.

Developing a strategy: Defining boundaries

Supporting systems boundaries

Maize case, PRISMA

We termed them *supporting systems*, you might also call them *support systems*, *sub systems*, *elements of the system* or *intervention areas*. More important than the term itself is to have a good description of what is included (and what is therefore excluded).
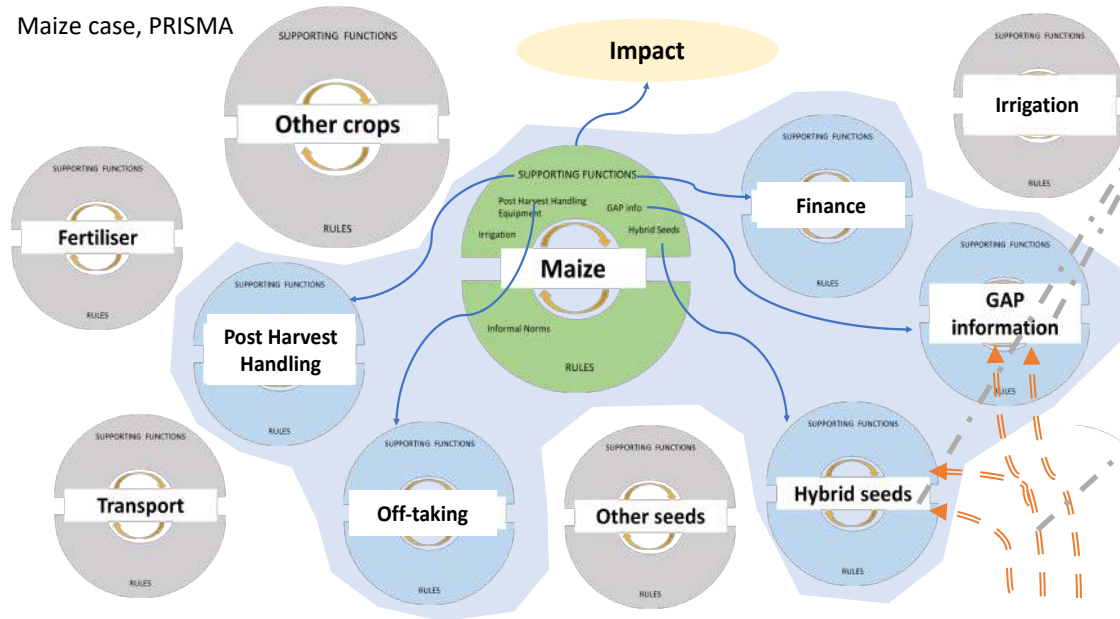
Coherence is crucial

Carefully selecting 3 to 5 supporting systems appears a good foundation for developing feasible system strategies.

1+1=3

Ensure that the support systems together are likely to lead to changes in the main system, don't disconnect supporting systems from the main system.

The selected supporting systems are the building blocks of the system strategy. Don't develop 'separate' supporting-system strategies, integrate them in the system strategy. They become your instruments to influence the main system.

Developing a strategy: Defining boundaries

Supporting systems boundaries

Maize case, PRISMA

Coherence is crucial

Supporting systems go together.
'GAP Information' goes hand-in-hand with *'Hybrid seeds'.* Only *'Hybrid seeds'* without *'GAP information'* doesn't lead to appropriate use of seeds. *'GAP information'* for maize should not become *'GAP information'* for crops in general.
Several interventions target supporting systems.
Some interventions will target both *'GAP information'* and *'Hybrid seeds'*, some *'Hybrid seeds'* only and others *'GAP Information'* only. Important is that the use of GAP information and hybrid seeds leads to performance changes of the maize system.

More information on page 12
Examples on pages 50 and 72

Developing a strategy: Defining boundaries

Developing strategies

A strategy needs to reflect how the program aims to achieve changes in supporting systems and how these changes are expected to lead to changes in the main system.

A strategy needs to balance focus and flexibility. Focus on what it intends to achieve, and flexibility in how it aims to do that (by searching for interventions).

A system strategy helps programs to:
1. focus on key constraints and opportunities in a system
2. guide implementation on what to do (and what not)
3. focus on assessing changes in the targeted system
4. use these assessments to review system strategies
5. focus communication on targeted and achieved changes

Focus   Flexibility

Developing a strategy

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Strategy development process

Starting state	→	Desired state	→	Strategy	→	Interventions
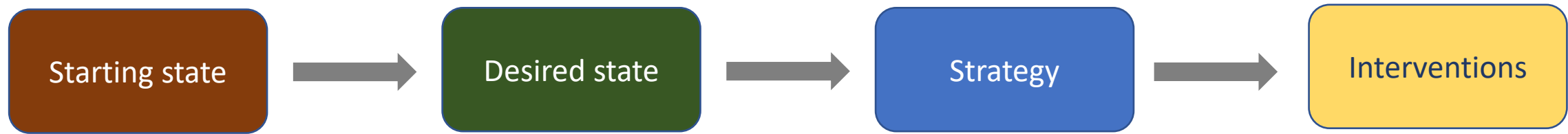
1 Starting state.   First describe how the main and its supporting systems function.

2 Desired state.   Then describe how the system should function: often more efficient, more inclusive and more resilient.

3 Strategy.   Then decide what needs to be done to influence the system to shift from the starting state to the desired state.

4 Interventions.   Develop them to implement the system strategy.

Most programs develop system strategies. Visualization is important to make strategies more concrete and more user-friendly, hence be used as a strategic tool to guide implementation. **A system strategy should have a system results chain and a system strategy table** that show when and how the program aims to change supporting systems, how that is expected to lead to changes in the main system, and how the target group is expected to benefit.
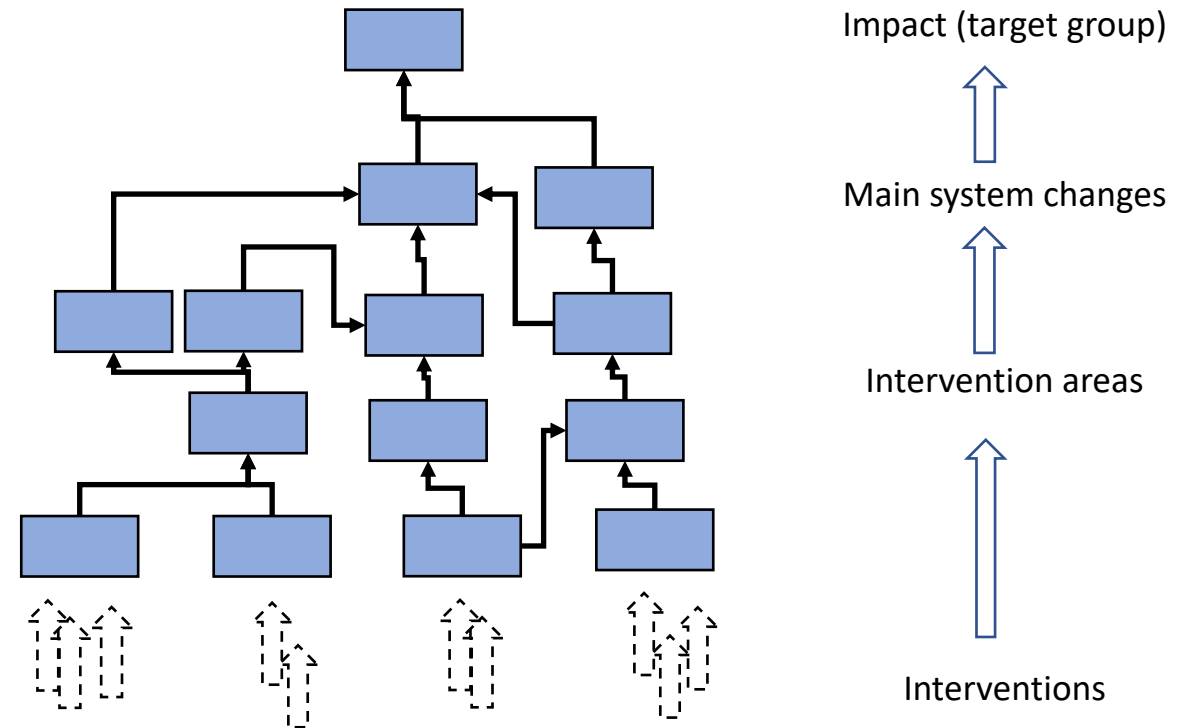
System results chains

System results chains are powerful tools to show how changes in supporting systems (*intervention areas*) are likely to lead to changes in the main system and how the target group benefits from those changes.

They help to make strategies more concrete: *are these causal changes likely to happen and how will they lead to impact?*

Ensure that a system results chain provides overview: it's not an aggregation of several (planned) intervention results chains.

Impact (target group)

Main system changes

Intervention areas

Interventions

Developing a strategy   **System results chain**

System strategy table

Indicators	Starting state	Plan	Desired state
Main system: e.g. maize			
xx			
Supporting system 1: e.g. hybri			
yy			
Supporting syst handing			
zz			

Define a few **critical indicators for the main system and each supporting system** that help to explain the difference between the starting and desired system states.

Plan **what the program will do when, and how that is likely to lead to changes**. Structure the plan per supporting system but ensure it's one coherent plan. Explain how changes in supporting systems affect other supporting systems and the main system, and how the program will reinforce changes.

A system strategy table helps programs to operationalize their overall system strategy. It helps to bridge the gap between strategic vision and interventions. It enables programs to outline how system changes are expected to occur. It helps programs to search for interventions. It helps to build resilience. It helps to review the strategy.

More information on page 16

Developing a strategy   System strategy table   14

System strategy table: **An example**

Maize case, PRISMA

Indicators	Starting state	Plan 2020-2025	Desired state
Volume of maize sold from target area	150,000 tonnes	The program will first focus on increasing the supply of hybrid seeds and embedded information on good agricultural practices (GAP) for small farmers from private and public actors. There is sufficient demand from local markets and local collectors who will buy and sell hybrid maize on the mainland to absorb an initial increase in supply.

The resulting increase in yields and supply, as well as seed companies targeting Madura Island, is expected to interest off-takers. PRISMA will facilitate off-takers to invest in sourcing from Madura Island and working with collectors to improve good post-harvest handling (PHH) among farmers. | 600,000 tonnes |
# of smallholder farmers engaged in at least 50% commercial production	79,000 (20%)		188,000 (50%)
% of maize sold that is highest quality grade	5%		30%
Private companies target Madura smallholder farmers as buyers/suppliers	None, (only indirectly via the subsidy program)		Becoming the norm; at least 8 companies
Private companies' recognition of women and men farmers	Assume farmers are men and focus on them		Recognize women and men farmers and focus on both
Farmers' perceptions of maize crop	Mainly subsistence		Both subsistence and cash crop
Etcetera			

Examples on pages 52 and 74

Developing a strategy   System strategy table

System strategy table

Limit the number of indicators to 5-7 per supporting system. This helps to maintain overview and make future assessments doable.

Focus on indicators that say something about the performance of the system and the behavior of the system actors. That implies scale: *how many do change in relation to how many don't change behavior.*

Use a combination of quantitative and qualitative indicators. It's not either but both: numbers (*how many, how much*) and perceptions / opinions of system actors (*norms, practices*).

Tips for defining indicators

Don't try to be too precise, rough numbers are often good enough for understanding how the system works and how the system is changing: '*the majority*' or '*70-80%*' is good enough.

If the initial system diagnosis didn't provide all information: incorporate collection in future plans. It's better to start with an incomplete picture than not to start at all.
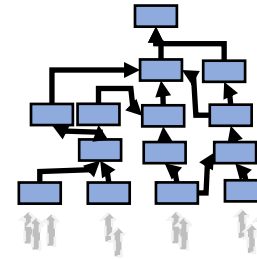
Developing a strategy   System strategy table   16

Developing and using the system strategy

Ideally the strategy is developed in combination with the system diagnosis and expressed in a system results chain and a system strategy table at the start (*it's a bit of an iterative process*).

Often, it will be difficult to develop a full fledged strategy: too much remains unknown. Most of the learning takes place during implementation.

Yet, it's better to sketch the strategy at the start, albeit a bit vague, than not to sketch a strategy at all. It will become stronger and more concrete while implementing and assessing progress.

System results chain ➕ **System strategy table**

Often strategies are explained in narratives. Transform its content to these two tools and use the process to '*sharpen the strategy'*.

Don't try to be perfect – just start applying!

It's much easier to review strategies with structured and visualized information than ploughing through many long stories.

Developing a strategy
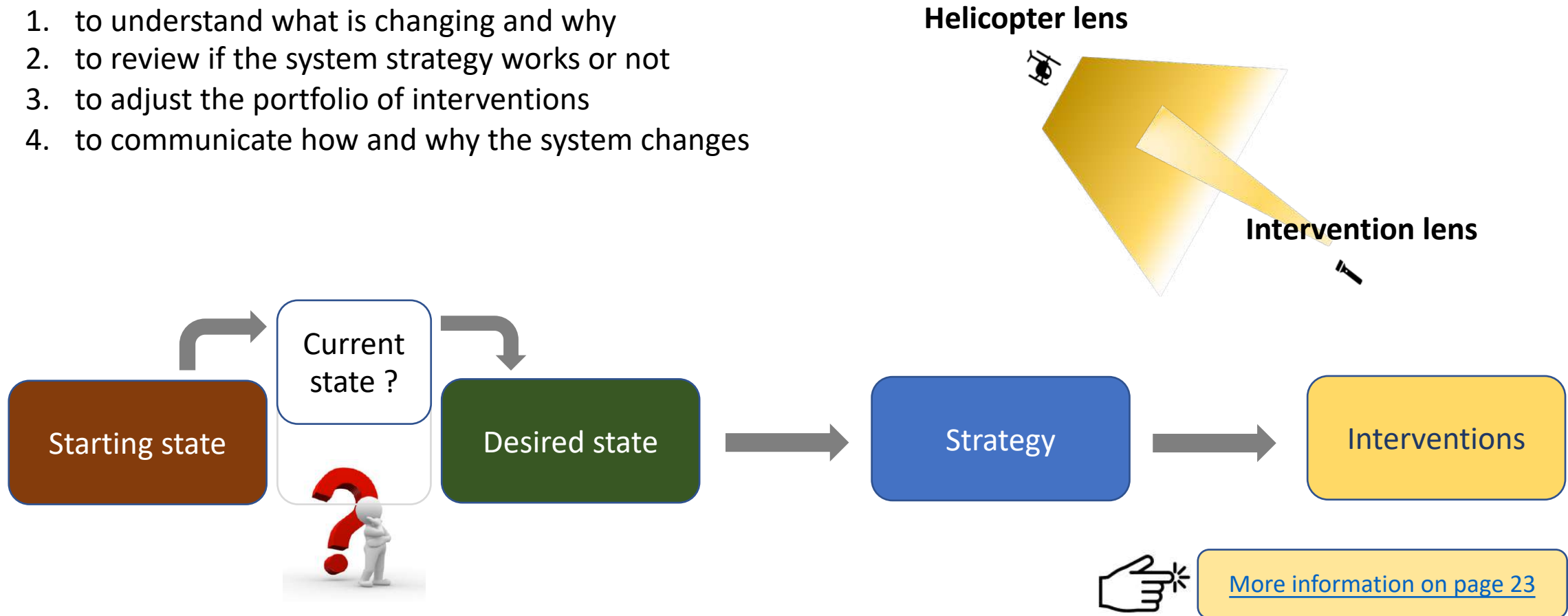
Assessing system changes

Why assessing changes in a system?

1. to understand what is changing and why
2. to review if the system strategy works or not
3. to adjust the portfolio of interventions
4. to communicate how and why the system changes

Use two lenses to assess changes:

Helicopter lens

Intervention lens

More information on page 23

Assessing system changes

Why using two lenses?

The helicopter lens helps to step back, assess and compare system changes between the starting, current and desired system state : what is changing, how and why?
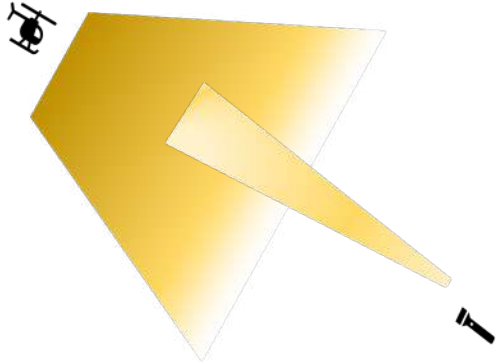
The intervention lens helps to track, assess and compare system changes as a result of the interventions: what is changing, how and why?

What most programs already do:

- Develop and manage interventions
- Assess progress and impact of interventions
- Review and revise interventions regularly
- Record anecdotical signs of system change
- Review strategies occasionally

Applying the intervention lens probably implies paying a bit more attention to tracking system changes when developing intervention monitoring plans. *More information on using the intervention lens is provided in the publication, this slide-deck focuses on the use of the helicopter lens.*

More information on page 23

Assessing system changes   Applying two lenses

How applying the helicopter lens helps to assess system changes

The helicopter lens helps to assess changes and compare the current system state with the starting and the desired system state: *what is changing, how and why?*

The helicopter lens helps programs to 'open up' and to understand the reasons for these changes. Understanding helps to review the strategy.

Watch this 2-minute video and realize what programs risk if they don't apply the helicopter lens

Starting state → Current state ? → Desired state → Strategy → Interventions

More information on page 27

Assessing system changes   The helicopter lens
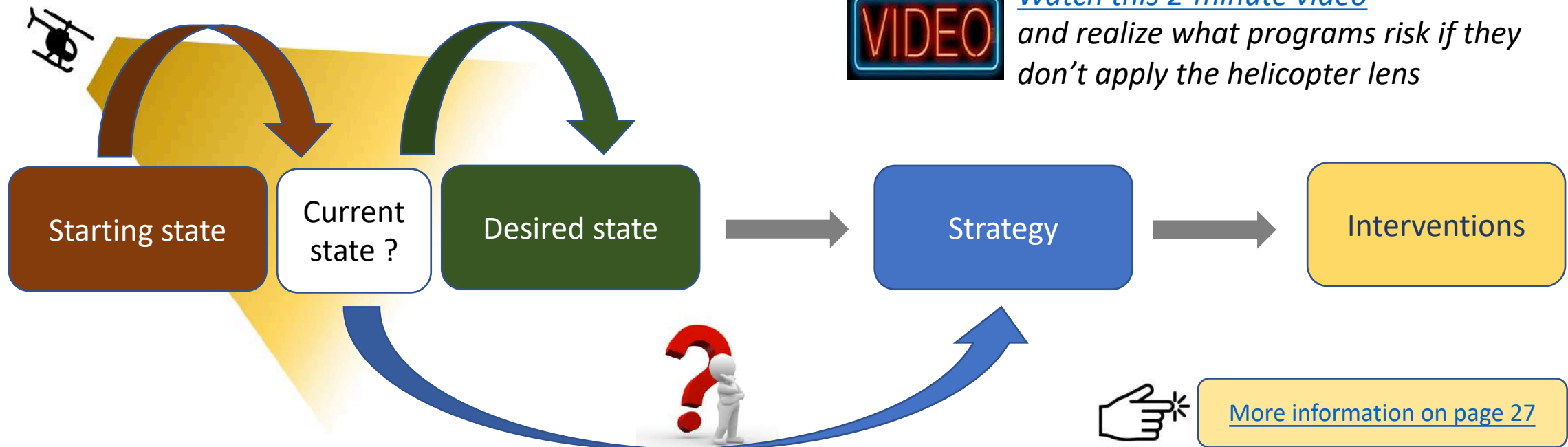
The helicopter lens

If you watched the video, you'll realize that if programs only use the intervention lens to assess system changes, they'll miss the gorilla.

Starting state

Current state ?

Desired state
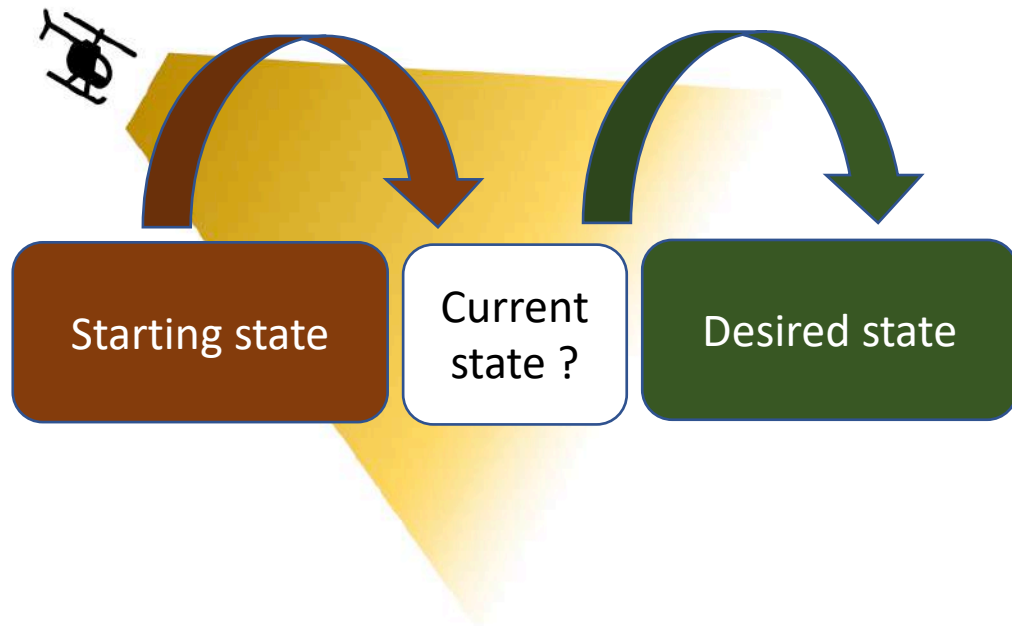
Three simple questions to answer:
1. What has changed?
2. How has it changed?
3. Why has it changed?

Programs need the answers to review their strategy. To understand and adapt. Now, not later.

👍 Forget about program interventions for the time being – this is not about attribution!

👍 Roughly right is good enough.

👍 Know what you can afford not to know!

Assessing system changes   The helicopter lens

The helicopter lens

Applying the helicopter lens leads to information needs. It does not have to lead to separate helicopter assessment plans. Incorporate research as much as possible into existing monitoring plans.

Only for information needs that can't be integrated in intervention level monitoring, develop a system monitoring plan. Together, these plans will lead to information on system changes.
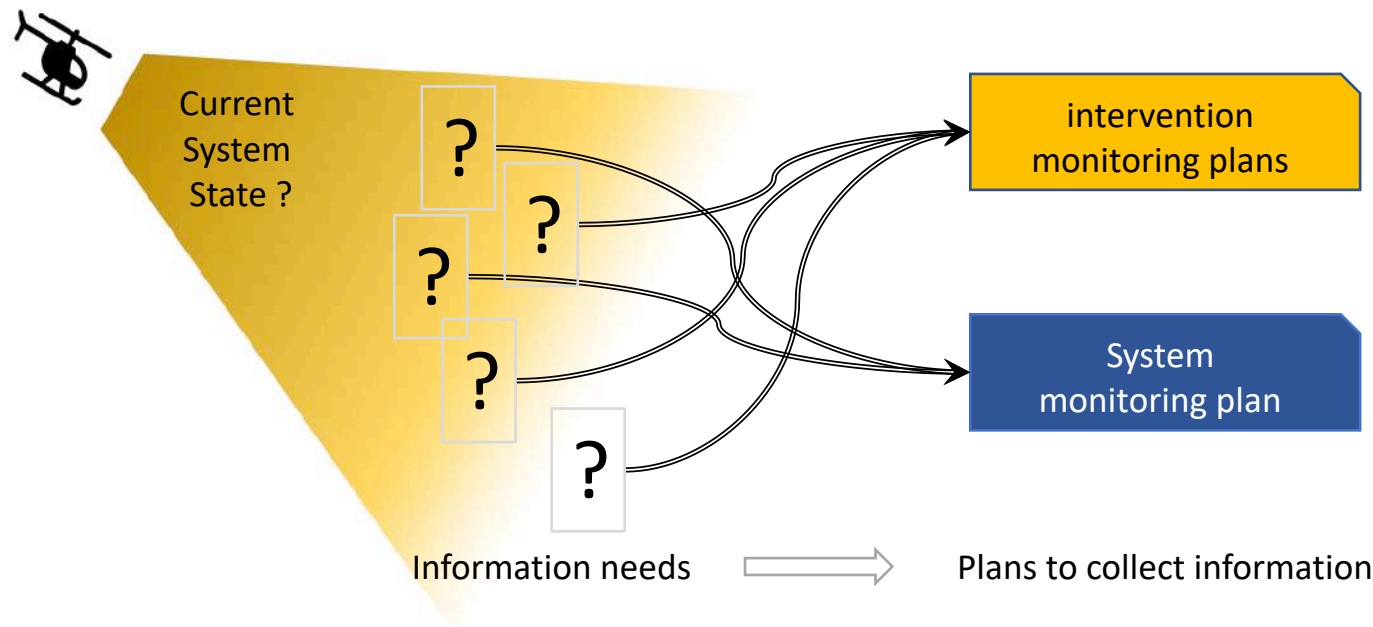
E.g. the question "how many and why other actors don't crowd-in?" can be included in intervention monitoring plans

E.g. "the parents' perception of VET" can't be answered through intervention monitoring only.

Current System State ?

? ? ? ? ?

Information needs → Plans to collect information

intervention monitoring plans

System monitoring plan

Using the helicopter lens

Use the 6 questions as a thinking tool

1 What do we aim to assess? *If, why and how ......*				
2 Indicators and questions to answer question 1	3 Who or what could be sources of information about this?	4 What type of information do they have?	5 How to collect this information?	6 When and how often to collect this information?

The system strategy table is the main source of inspiration. *What and who is changing, what and who is not changing, and how and why?* **First** define a coherent set of key questions for the main system and each of the supporting systems. **Then** translate these key questions into indicators (or questions) that help to answer the key questions. **Only then**, brainstorm where to find the answers: which sources and which opportunities to use?

Using the helicopter lens

Tips for defining questions (Question 1)

1 What do we aim to assess?   Support system: Teaching methods

Are teachers gaining the appropriate technical and pedagogical skills? Why/why not? Are there differences for different groups of teachers, geographical location, directions? If so, why?
Do teachers have access to and use appropriate learning materials? Why/why not? Are there differences for different groups of teachers, geographical location, directions? If so, why?
Are teachers applying blended learning methods? Why/why not? Are there differences for different groups of teachers, geographical location, directions
Are schools developing appropriate infrastructure to support blended learning? Why
Are students learning better

VET case, S4J

Start with the main system questions, then dive into the supporting systems. This helps to apply the helicopter view: **top down/overview versus bottom-up/intervention focus.**

Focus on understanding performance and behavior changes of the main system and supporting systems: **scale, sustainability, perceptions, norms and resilience**. Search for links between supporting systems.

It's often easier to define questions (*what do I want to know?*) than to define indicators (*what do I measure?*)

Limitation is your main challenge. 5 to 7 key questions for the main system and for each supporting system. More will make research too demanding. Brainstorm first, then select and structure.

Examples on pages 58 and 77

HPC

Using the helicopter lens

Tips for defining indicators (Question 2)

1 What do we aim to assess? **Has blended learning become the norm for VET Schools? Why / why not?**

2 Indicators and questions
Number of schools, directions, teachers that use blended learning
Number of schools, directions, teachers that don't use blended learning
Number of students that use/don't blended learning
Reasons why and how schools, directions, teachers and students use or don't use blended learning

VET case, S4J

For each of the defined questions (*Question 1*) **first define what you need to know**: sub questions or indicators that help to assess changes (*Question 2*). Focus on scale, sustainability, perceptions, norms and resilience

Its crucial to first define the questions (*Question 2: what you need to know*) and **only then to look for sources of information.** This avoids going only to the 'usual suspects', often the intervention partners, and ask what they know. It helps to open up and identify alternative sources.

Assessing system changes   The helicopter lens

Using the helicopter lens

Tips to collect information

1 What do we aim to assess? Has blended learning become the norm for VET Schools? Why / why not?				
2 Indicators and questions Number of schools, directions, teachers that use blended learning	**3 Sources of information about this?**	**4 What type of information do they have?**	**5 How to collect the information?**	**6 When and how often to collect the information**
	Partner schools	User information	MoU to provide access to MIS of supported schools	Quarterly electronic updates up to end of program period
Number of schools, directions, VET case, S4J	National VET agency	Opinions	Interview key staff at the National VET Agency	First trimester when they have their annual meeting
			with a few interviews with	Summer academies where most teachers meet

👍 **Triangulation helps. Puzzling helps**. Collect information from different types of system actors: *partners, non-partners, key informants, suppliers, users, service providers, regulators, research institutions, etc.* A handful seems to be the practice.

👍 **Be creative**, avoid huge in-person surveys, use statistical information, social media, e-surveys and qualitative research methods.
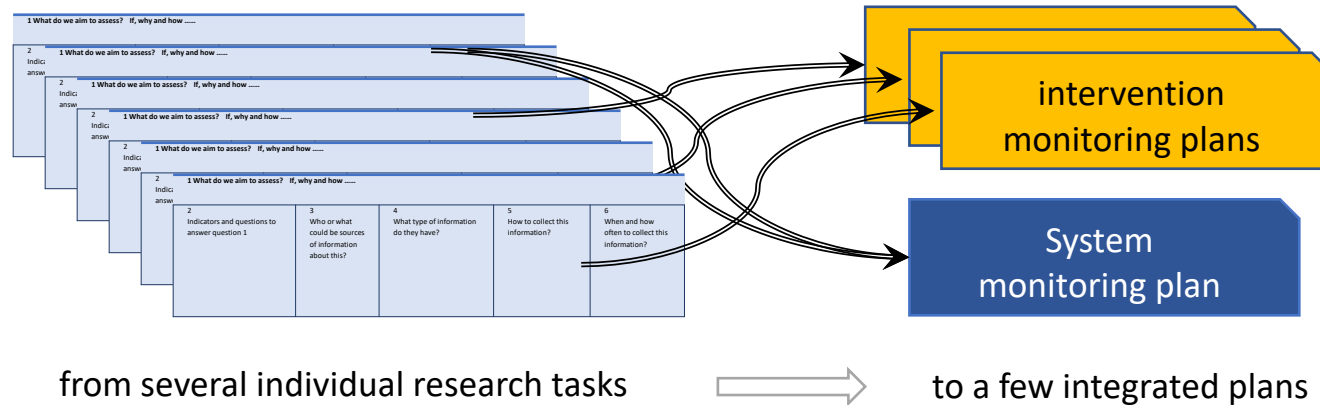
👍 **Its about being roughly right**: signs of change confirmed by several sources is more valuable than accurate data from only one source.

👉 Examples on pages 58 and 77

Combining research into operational plans

from several individual research tasks → to a few integrated plans

Defining when and how to collect information about each supporting system and the main system leads to a long list of research tasks indeed. Yet, in practice, these research tasks will be combined. The majority of research tasks will use the same handful or a dozen of sources as the main source of information.

The table is a thinking tool. It helps to identify crucial information needs and helps to identify creative and lean ways to collect information.

Develop user-friendly operational plans that provide overview and guidance to increase ownership of program implementation staff.

It's basically repeating the initial system diagnosis at inception, but now you are active in the sector (and not new) and you have a year to do this (and not a few weeks). Should be doable!
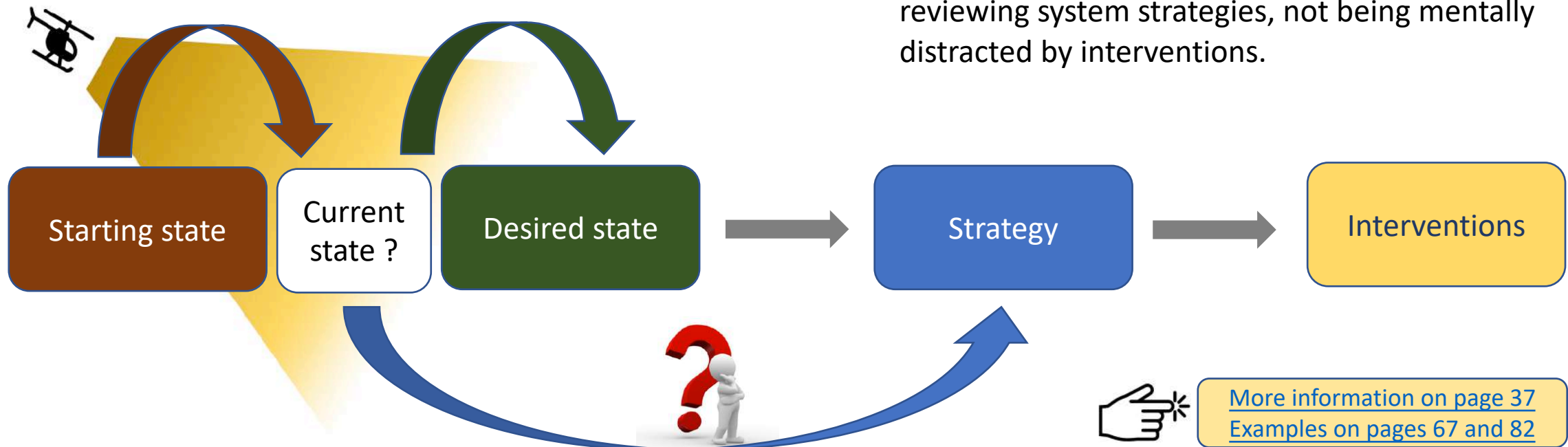
Examples on pages 63 and 81

Assessing changes

Review system changes & strategy

Assessing systems, reviewing strategies

Main challenges:

To understand what is changing, how and why (not) and to decide what that implies for the strategy: to continue, adjust slightly, adjust drastically, or stop.

Now, not later!
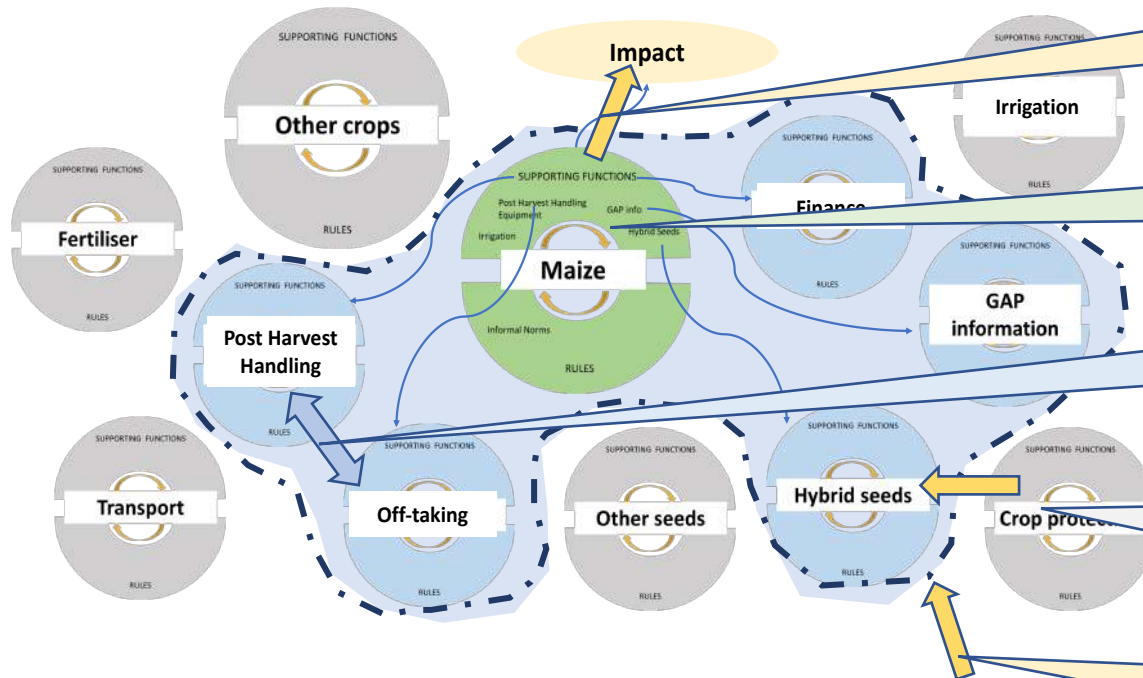
- to have all information at hand (*facts, processed information, not a pile of reports, no gut-feelings*).
- to focus on assessing system changes and reviewing system strategies, not being mentally distracted by interventions.

Starting state → Current state ? → Desired state → Strategy → Interventions

More information on page 37
Examples on pages 67 and 82

Reviewing

Analyzing changes in systems

Causalities and synergies

Maize case, PRISMA

Impact: if, why and how are changes in the main and supporting systems affecting the target group?

Main system; if, how and why is the main system changing, do changes in supporting systems lead to changes in the main system?

Supporting systems; if, how and why do changes in one supporting system lead to changes in other supporting systems?

Supporting system outside the boundary; if, how and why are changes in other supporting systems affecting the main system and supporting systems?

Context; are there contextual changes that (have or will) affect the main system and the supporting systems?

Reviewing   **Helicopter lens perspective**   31

Updating the initial system strategy table

Indicators	Starting state	Current state	Desired state
Main system			
1.		•	•
2.			
Progress			
	•		
Supporting system 1			
1.	•	•	
2.	•		•
Progress	•		
	•		
	•		

> **Start with the main system and add the supporting systems.** Keep them all in the same table for overview to understand causalities and synergies.

> **Insert the information on the current state** to facilitate comparisons between the starting and desired state (indicators).

> **Add critical additional information** on indicators e.g. variance between segments and qualitative information.

👍 **helps to have a concise overview of system changes while reviewing strategies**

Reviewing   **Using the strategy table**

Updating the strategy table
An example and tips

Indicators	Starting state	Current state	Desired state
Public VET system			
Number of graduates finding gainful employment	30% of employed graduates are employed in the sector and trade they were trained for	For cohort 2019: 51% (partners schools) For cohort 2020: ± 25 to 50% (all schools)	60% of employed graduates are employed in the sector and trade they were trained for
Average time-to-employment for gradu...		For cohort 2019: 75% within 3 months (partners schools only) For cohort 2020: up to 50% of the students has already secured a job before graduation (for most schools – no data on some directions from some schools)	Average time-to-employment is 3 months
Progress		...s (30% to 70%) and schools (25% to 50%)	

> Some data will be less robust.
> **Be clear what the data covers.**
> Accept that it won't be perfect.
> *And deal with it.*

- Among directions; employment varies from ±20% (e.g. Textile and Economics) to ±85% (e.g. Tourism and ICT).
- Households have been affected by the COVID-crisis with low levels of trust in the economy and concerns about job security
- Migration to USA and Europe has been steady but sharply reduced since the start of the COVID-crisis

VET case, S4J

Show changes over-time, especially if there are deviations during the period under review.

Add meaningful data: understanding variances is often more informative than averages. Facts and findings only. Maintain overview: only present the most critical information.

Reviewing
Using the strategy table

Analyzing changes in systems

Indicators	Starting state	Current state	Desired state
Public VET system			
Number of graduates finding gainful employment	30% of employed graduates are employed in the sector and trade they were trained for	For cohort 2019: 51% (partners schools) For cohort 2020: ± 25 to 50% (all schools)	60% of employed graduates are employed in the sector and trade they were trained for
Work Based Learning			
Schools integrate apprenticeships in their curricula Companies offer apprenticeships	Schools don't integrate apprenticeships in their curricula Companies don't offer apprenticeships: no interests	In most directions at partner schools there are now apprenticeships for XI and XII graders. Some ± 35-45% of all schools integrate apprenti...	60% of schools (20 out of 34) integrate apprenticeships in at least 15% of their curricula There is a surplus of companies offering
Curricula			
Curricula meet the n... VET case, S4J		30% of th... Some ±1... 25% of t...	

Maintain a systems focus: what has changed, how and why. It's about identifying changes and understanding what caused them, not about seeking changes that may have resulted from interventions. 👍

Search for causalities and synergies between the main system and each supporting system: *in this VET example the successful uptake of the apprenticeships model created openings to improve curricula and graduates got employed more easily.* 👍

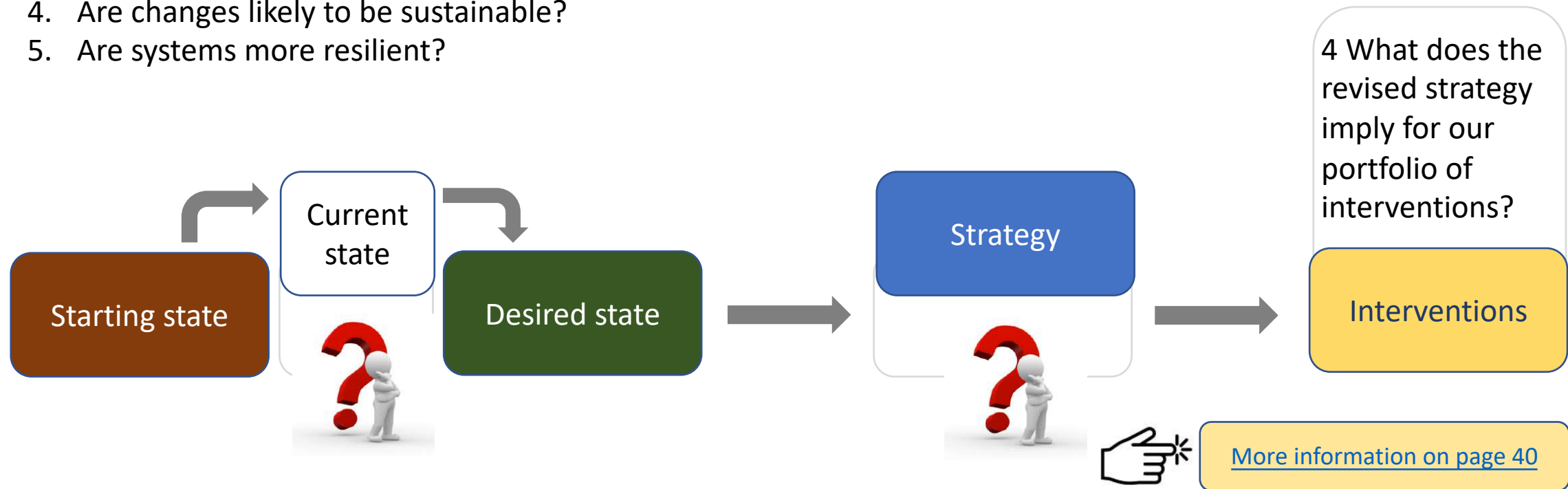☞ Information on contribution analyses on pages 33 and 65

☞ Information on page 40 Examples on pages 67 and 82

Reviewing   **Using the strategy table**   34
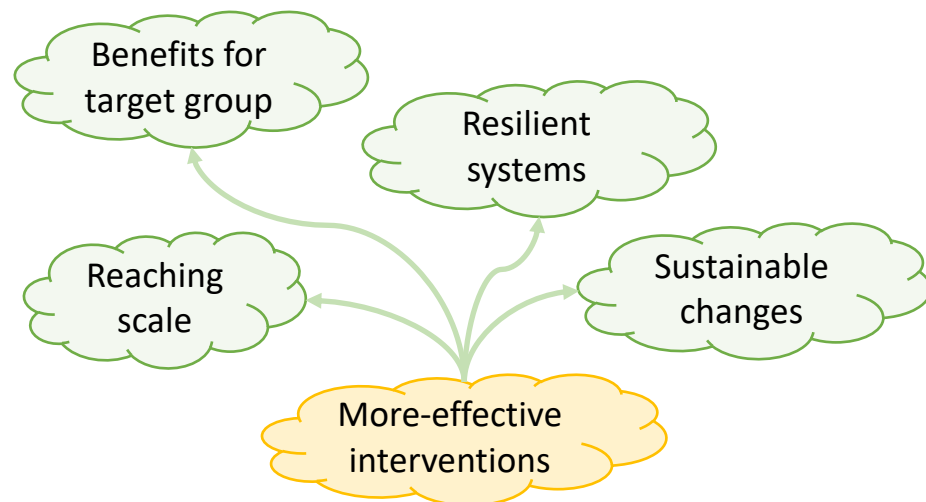
From reviewing system and strategy

1. Are the expected changes happening?
2. Did any unexpected changes happen?
3. Why did or didn't changes happen?
4. Are changes likely to be sustainable?
5. Are systems more resilient?

To deciding what to do:

1. do we continue with this system?
2. do we need to adjust boundaries?
3. do we need to adjust the strategy?

4 What does the revised strategy imply for our portfolio of interventions?

Starting state

Current state

Desired state

Strategy

Interventions

More information on page 40

Reviewing

Revising strategies

35

Why focus on system change?

Benefits for target group

Resilient systems

Reaching scale

Sustainable changes

More-effective interventions

"System change is change in the underlying causes of market system performance that leads to a better-functioning, more pro-poor market system"

DCED, 2017

Time to start applying!

👍 Build on what the program already has.

👍 Take baby steps – test what works best.

👍 Learn by doing: focus on using the information.

👍 It doesn't need to be perfect!

👉 For more on system change visit also BEAM Exchange and DCED

Summarizing   Take-away messages

Acknowledgements

Thanks are due to the Donor Committee for Enterprise Development (DCED), the Ministry of Foreign Affairs of the Netherlands (MoFA) and the Swiss Agency for Development and Cooperation (SDC) for sponsoring both the workshop and the resulting publications. The organizers are grateful to all the participants, presenters and facilitators of the workshop for their willingness to share their challenges, insights and tips. A big thank you to the S4J and PRISMA teams, in particular Eltjana Plaku and Adriana Milka, for their support in developing their cases, and last not least to co-facilitators Aly Miehlbradt, Nabanita Sen Bekkers and Phitcha Wanitphon for their valuable input and feedback.

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