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Developing an Impact-Oriented Measurement System

A Guidance Paper for Financial Sector Deepening Programmes

REDUCING POVERTY
THROUGH FINANCIAL SECTOR DEVELOPMENT

This document provides the fourth chapter of the IOM guidance, focusing on setting up the IOM for the FSD programmes

IOM – Chapter 4: Clarity of Purpose (Stage 1)

Stage 1: Clarity of purpose

Step 1: Setting out an evaluation Programme ToC

Step 2: Developing impact measurement questions

Stage 2a: Measuring change – what happened?

Step 3: Developing indicators

Step 4: Data collection methods and sources

Stage 2b: Measuring change – why it happened?

Step 5: Assessing causality and contribution

Step 6: The research agenda

Stage 3: Bringing it all together

Step 7: Developing a credible narrative

Implementing the IOM (Chapter 7)

Chapter 4, Clarity of purpose, covers Stage 1 of the process of implementing the IOM guidance.

This stage is focused on setting up the IOM for the FSD, ensuring that there is a shared understanding of the programme's main objectives, and what the FSD is seeking to measure. This stage is more relevant at the start of a FSD's strategy period.

Stage 1 is broken into two steps:

Step 1 – Ensuring that the FSD ToC is evaluable: This step sets out the FSD's programme theory of change, and how this will influence the measurement process.

Step 2 – Developing impact measurement questions: This step provides a coherent set of measurement objectives to orientate the implementation of the IOM.

4.1 Ensuring that the ToC is evaluable (STEP 1)

4.1.1 Overview

- This step focuses on setting up the IOM, which is most likely to take place at the start of a new strategy period
- Setting out what is to be evaluated – the Programme ToC – is a pre-requisite, to help determine what impacts the FSD is seeking to achieve, and how they are expected to be achieved
- This step provides guidance on how to assess whether the ToC is evaluable, and how to improve its ability to guide subsequent measurement
- To provide detailed analysis of causal pathways it will often be necessary to link a programme ToC with thematic ToCs and specific individual project results chains

4.1.2 The ToC and its role in the IOM system

A ToC provides the basis for IOM. It is important that FSDs explicitly articulate a ToC that reflects the programme (and through it the projects, which nest within this ToC) that will be evaluated. Annex B lists some issues to consider in developing a programme ToC, with the focus here on assessing if it will provide a framework for implementing the IOM guidance.²⁷

As elaborated in Box 5, throughout this guidance we use the term ToC to represent causal pathways and the context (and assumptions) in which they operate at programme level or in a thematic/pillar area (i.e. a group of interventions closely connected to a broad objective of an FSD, such as digital financial services). For measurement purposes, the ToC should clarify the main impacts and causal relationships it wants to test as part of the impact evaluation, and the context in which the FSD is operating.²⁸

This will form the basis on which the entire measurement system will be developed, including the impact measurement questions (see Step 2), definition of indicators (Step 3), and overall programme evaluation approaches (Step 7).

Tip: It is important to remember that ToCs are best-informed guesses of how market development change will proceed, and will need to be periodically reviewed and updated in the light of changing circumstances or emerging evidence. Unexpected changes in the financial sector or the environment may require adjustments to the causal pathways in the ToC, or evidence arising from the implementation of a programme may reveal that one or more of the assumptions on which the ToC was built was mistaken and needs adjustment.

Box 5 ToC, results chain, logframe – how do they relate?

Many different terms are used to describe how a programme intends to achieve its impact. This can be confusing, not just because of the number of terms used, but also because the same term can mean different things to different people, and sometimes the terms are used interchangeably (see Figure 4 above). We provide common definitions of these terms in Annex A, although we are conscious that these definitions are not the only ones in use.

For multi-project programmes such as FSDs, these tools fulfil different functions. The **programme logical framework (logframe)** is a standard requirement for development funding, with FSDs having to develop and report on a logframe using a set matrix template for many funders. The primary use of a logframe is therefore an accountability tool.

A **ToC** is typically seen as a precursor to and expansion of the logframe, articulating why the series of results is expected to occur and focusing not just on the ‘boxes’ but also the ‘arrows connecting the boxes’ of a traditional logframe. ToCs look at the assumptions (implicit or explicit), risks and external factors that are important in relation to results being achieved.

The term **results chain** is used to describe a more detailed causal pathway, focused on an individual intervention or project. The project results chain should be consistent with the overall ToC (see 4.1.6), and from a measurement perspective it will provide much of the evidence base (‘the results’) that will be used to test the overall programme.

Tip: Though ToC and results chains are often presented as visual figures, the narrative explaining the programme logic is key and should supplement any visual, in order to help the reader and to avoid making the figures very complex.

4.1.3 Articulating systemic change in a ToC

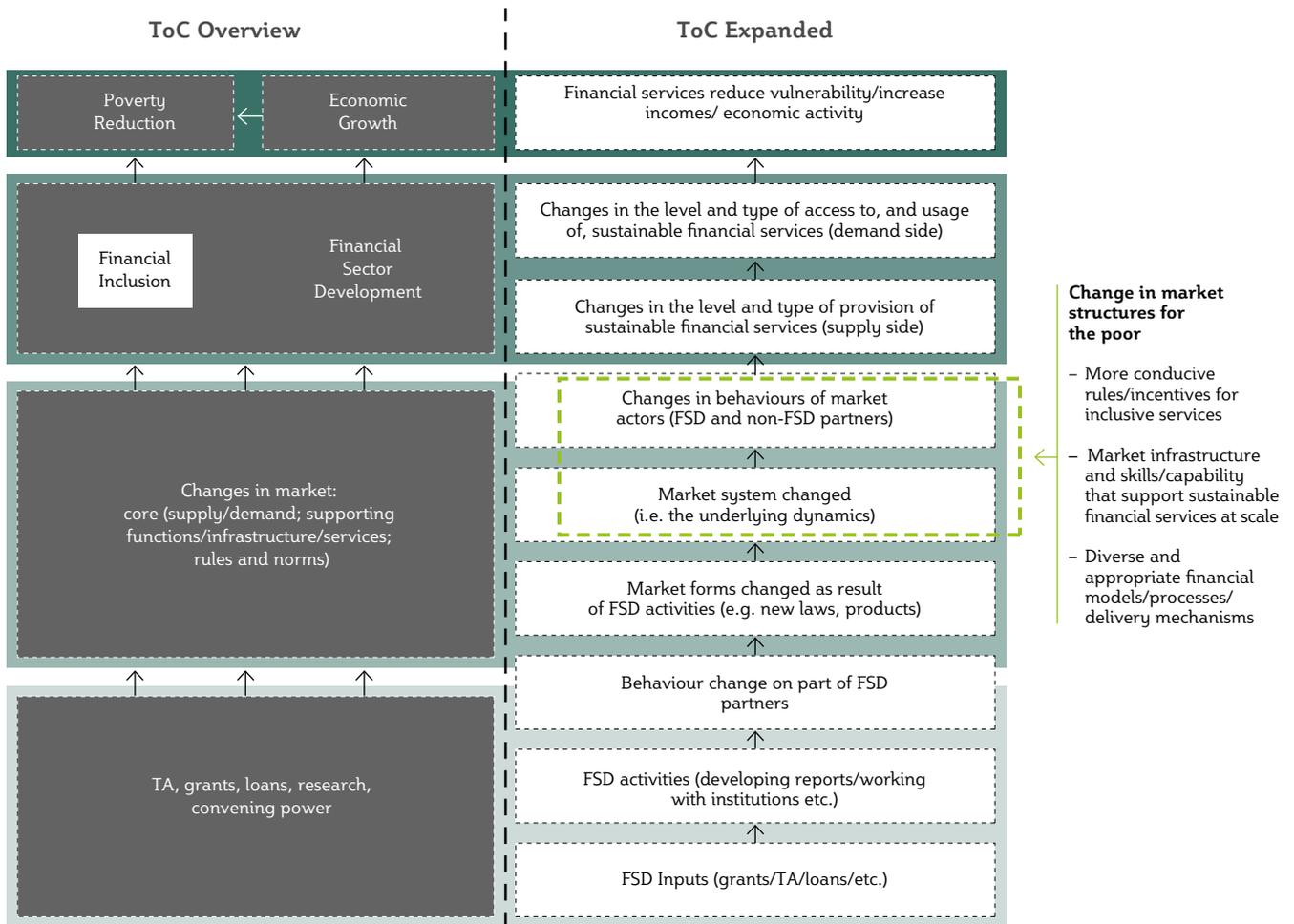
Systemic change refers to the broader transformation that takes place in the sector as a result of the programme. It is important for FSDs, at programme and theme level, to articulate how they anticipate their

27. Every development intervention is necessarily based on some kind of ToC, but the ToC is not always made explicit. If an FSD has a ToC that is only implicit, then it is useful to set it out explicitly, along with the assumptions regarding how parts of the causal process are expected to work, and how contextual factors may affect the programme – see Vogel (2012).

28. In particular, this will require FSDs to revisit their core assumptions regarding the binding constraints on the market working effectively for the poor, and to what extent they have removed/eased these constraints, and to what extent, by doing so, the market is producing better financial sector outcomes for an FSD’s target group.

interventions will lead to changes through direct acts of facilitation, **but also how these interventions will fundamentally change the market in a way that enables even greater and more sustainable impact on users beyond the changes directly supported by the FSD and its partners.** Figure 6 provides a brief overview of how systemic change can be elaborated in the context of the generic ToC.

Figure 6 ToC and systemic change



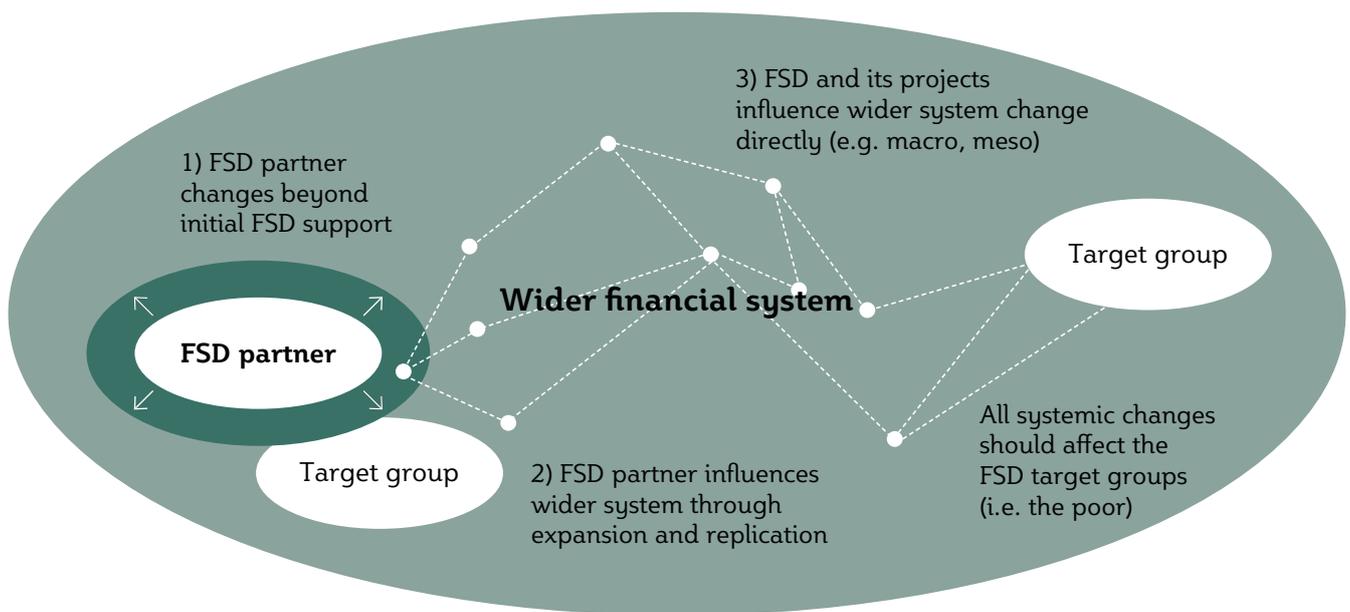
More specifically, Figure 7 shows three main pathways by which FSDs can promote systemic change. FSDs can consider including these pathways in their ToCs (and project results chains). These three pathways are:

1. the effects of the project on the partner and their immediate sphere of influence (for example through supporting a bank to move downmarket);
2. the effects that their partners have on the market system by demonstrating expansion and attracting replication (or championing reform with policy-makers) through their networks and others participating in the wider system; and

3. the effects that changing the structures of the system can have on the incentives for system actors. This may be triggered by FSD partner successes as well as directly by FSD-facilitated activities/projects, not just with the financial services providers but also policy-makers and other stakeholders (dialogue, research, advisory and advocacy activities).

Tip: An FSD can consider which pathways are relevant ex ante (i.e. during the investment decision phase), as well as monitor if expected pathways are working and/or others appear during implementation.

Figure 7 Pathways to systemic change



Source: Adapted from Osorio-Cortes and Jenal (2013)

4.1.4 How to check that your ToC is evaluable

For a ToC to be evaluable it must be clear, relevant, plausible, testable, and contextualised, and it must take account of complexity.²⁹ Whilst these criteria can also be applied to individual results chains, they are likely to be too resource-intensive to be applied to all interventions, especially as many will not be subject to individual evaluation.

Clear: For a ToC to be clear, two elements must be considered:

- **Are the final impact, the financial sector outcomes and the outputs clearly identified?** FSDs should check that their impact, outcome and output statements are clearly defined. This means specifying, at each level, the change(s) that you want to see, who should benefit (or what beneficial change should happen) and by when.
- **Are the proposed steps towards achieving these clearly identified?** FSDs that achieve change rely on complex interactions and feedback loops. Key causal strands need to be unpicked to show how change is expected to occur. FSDs should, in particular ask:
 - Does your ToC explain how your programme outcome is expected to lead to poverty reduction and/or economic growth? The links discussed in the accompanying paper *The relationship between financial sector development, economic growth and poverty reduction* could be applied here.

- Does your ToC explicitly incorporate systemic change (see below)? For example, does it capture both the direct and indirect effects of your interventions? Does it show how change in rules and norms or supporting functions could lead to changes in the interaction between suppliers and consumers of financial services?

Relevant: Are the programme objective(s) clearly relevant to the needs of the target group, as identified by any form of situation analysis, baseline study or other evidence (undertaken by FSD or others)? Is the intended target group clearly identified? FSDs should particularly consider:

- Could you use your market diagnostic to check the relevance of your programme objectives and if the intervention logic still holds?
- Do you have a focus on a particular group—for example, small and medium-sized enterprises (SMEs) or women? This will help you to define your target group.
- Have you explained why an M4P approach is more relevant to the target group than alternatives such as direct interventions/ service delivery?³⁰

29. These criteria and general questions are adapted from Davies (2013). We have not included Davies' criteria of 'valid and reliable', because these are more about indicators, which we discuss in Stage 2, or 'consistent' and 'agreed', because these are more about organisational arrangements.

30. In their review of M4P evaluations, Ruffer and Wach (2013) find that no evaluation explicitly looked at this, but the assumption that the M4P approach is optimal should be tested.

Plausible: For a ToC to be plausible, two elements must be considered:

- **Is there a continuous causal chain connecting the FSD with impacts at the outcome or final impact levels?** Markets are complex and it can be hard to capture this complexity. There is a danger that a programme ToC will be too simplistic, or be based on past projects or an existing logical framework; it can also be too linear, with every step in the chain expected to follow automatically on from the next. To avoid this pitfall, FSDs should, in particular, consider:
 - Does the target group at the final impact level logically follow from the target group at the financial sector outcome level? For example, it is less plausible that poverty reduction could be achieved for all poor people in a country if the outcome is improved financial inclusion for only a small sub-set of people.
 - Can project or thematic results chains be ‘nested’ within the programme ToC? It will be difficult for FSDs to capture the entire causal chain, particularly all the potential links from inputs to outputs, in one diagram. However, assumptions about how the mechanisms might work between inputs and outputs are often unstated or simplistic, with limited consideration given to contextual factors or unintended consequences. This is why we are recommending that FSDs nest their project or thematic results chains within the programme ToC (see Box 7).
- **Is it likely that the programme objective will be achieved, given the planned interventions, within the programme lifespan? Is there evidence from elsewhere that it can be achieved?** FSDs should particularly consider:
 - To what extent existing evidence can be used to substantiate the causal links in the ToC. For example, a separate paper “The relationship between financial sector development, economic growth and poverty reduction” could be used to explain the links between financial sector outcomes and ‘final impact.’ This is a difficult area, one that is still being tested by global research, so the ToC should be clear regarding the extent to which evidence from other studies substantiates the FSD ToC in a particular context.
 - Are longer-term effects adequately captured? Apart from initial ‘quick wins’, FSDs are more likely to be aiming for changes that require time to take root, and in some cases for changes that are not solely related to their own interventions, but that are dependent on a variety of factors coming together.

Testable: Is it possible to identify which linkages in the causal chain will be most critical to the success of the programme, and which should thus be the focus of evaluation questions? Assumption testing is essential to the robustness of TBE. FSDs should particularly consider:

- What did your market diagnostic identify as the primary constraint on the programme objective being achieved? Testing to what extent this constraint was overcome is important. If it was overcome, then the impact on financial sector development of the removal or easing of the constraint should then be captured in the evaluation questions (see Step 2 for guidance on this).
- Are assumptions about the systemic nature of your interventions critical to the success of your programme? Have you defined exactly what you mean by systemic change, and how to measure it?

Contextualised: Have assumptions about the roles of other actors outside the programme been made explicit? A risk of taking a theory-based approach is the overstatement of causal contribution. For FSDs, which seek to facilitate change, it is important that the interaction of the programme with the context (i.e. the financial sector and the economy as a whole) is elaborated, to help ensure that impact is not overestimated (or underestimated). Understanding what others are doing and ensuring that FSD interventions are coordinated with such actions is part of a good market diagnosis. FSDs should explain their incremental strategic role (i.e. relative to others) in the narrative part of their programme ToC.

Complexity: Are there expected to be multiple interactions between different components, thus complicating the attribution of causes and identification of effects? How clearly are the expected interactions defined? FSDs are complex programmes that are working in complex contexts. At a minimum they should ask:

- Have you identified potential unintended effects? Assessing impact is about understanding the unintended as well as the intended consequences of action — particularly the negative unintended consequences. One way of doing this is by developing a ‘negative’ programme theory; for example, some households or enterprises may be negatively affected because others are benefitting from programme activities (displacement). When is this likely to occur? What exactly are the implications for households and enterprises, and how will this affect the achievement of the programme objective?
- Have you identified sequential dependencies in your ToC? For example, your market diagnosis may have identified that achieving a policy change will be important in regard to the effectiveness of other

interventions (a classic example being the need for a suitable agent banking regulatory framework when promoting remote access banking technology).³¹

Tips for assessing the evaluability of the programme ToC include the following:

- A facilitated workshop may be an effective way of checking the evaluability of your programme/ theme ToC. This can occur as part of the strategy design process. Working through the evaluability criteria above may reveal some weaknesses in the current version, or perhaps even the strategy that it underpins, and these weaknesses will need to be addressed. A facilitated workshop should help to build consensus on these points, and also confirm which ToC should be used as the framework for the evaluation.
- External perspectives, either obtained at the workshop or gathered separately, may be helpful for ensuring, in particular, that contextual factors are included, that large attribution gaps are not present, and that secondary evidence is marshalled. This also helps confirm if someone not closely involved with developing the ToC (e.g. a member of the FSD Programme Investment Committee (PIC)) can understand the core logic and underlying assumptions and deal with any ‘self-importance bias’.
- Keep a record of the different versions of your programme ToC and of the reasons for the changes. This will be useful for evaluation questions such as:
 - To what extent has the programme been implemented as envisaged by the programme level ToC?
 - If an envisaged result was not achieved, was this due to a failure in the original theory or a failure in implementing the project or programme?

4.1.5 Project results chains

At any given time an FSD programme is made up of a cluster of projects. Each of these projects has its own project logic, and key evaluation questions. The logic for different projects and the evidence collected to confirm performance will make up the core evidence base for testing the overall programme ToC. All FSDs attempt to set out the intervention logic for a specific intervention – referred to as ‘results chains’ throughout the guidance. Results chains help to:

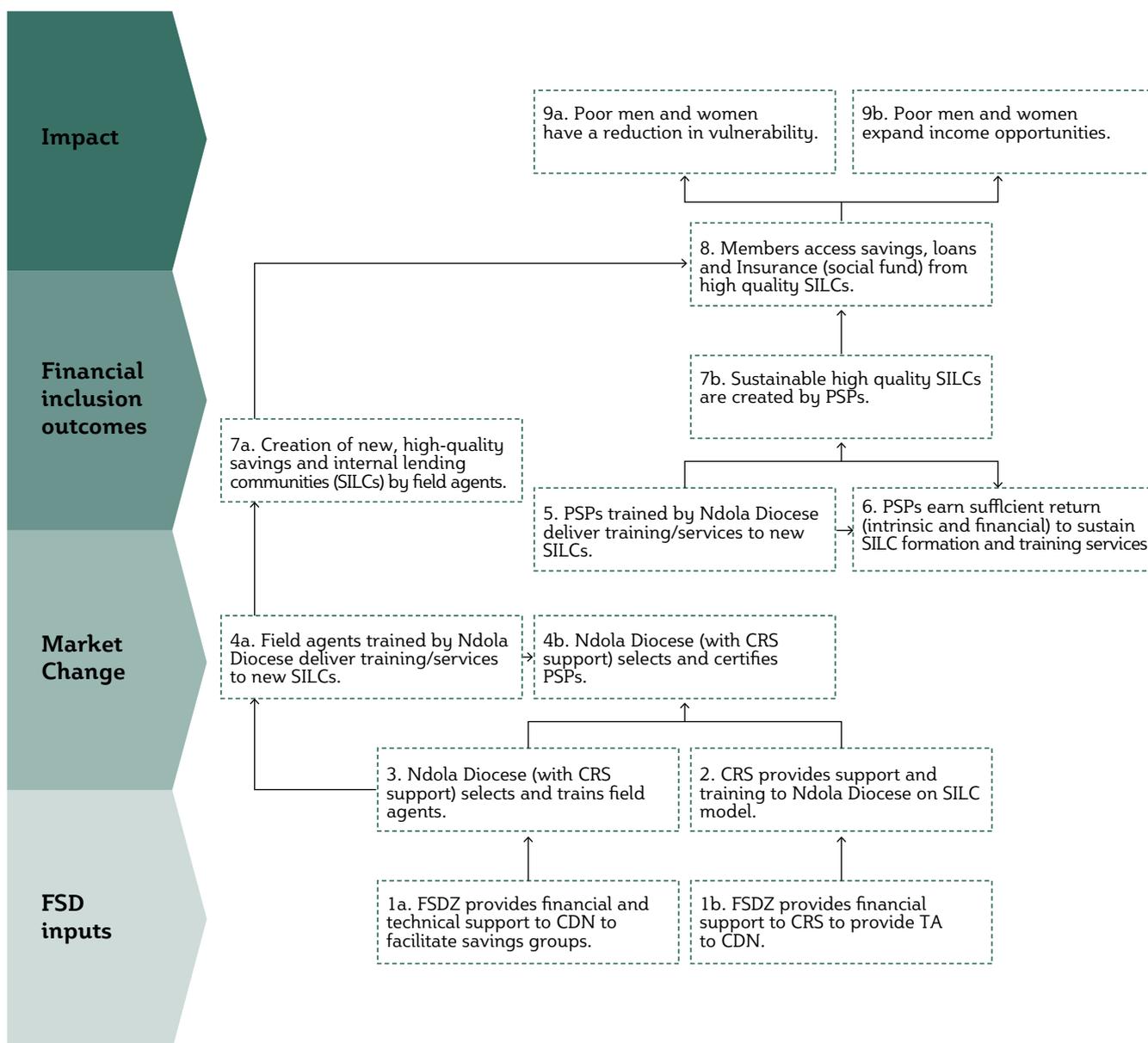
- set out the activities that the FSD will undertake, the outputs of these activities and the outcomes and eventual impacts expected;
- provide the basis for assessing if and to what extent changes are taking place; and
- provide the basis for assessing to what extent changes are due to programme activities.

Results chains, as illustrated by the example in Figures 8 and 9, provide an articulation of specific FSD interventions to help ensure coherence with the programme ToC, and ensure they are generating the appropriate evidence given the IOM objectives.

Discussion point: FSDs have noted the importance of in-depth analysis in measuring impacts along a results chains, not just the end impact. This breaks down the complex results chain into something easier to measure. Moreover, it allows them confidently to adjust their interventions if the results are not seen to be as intended.

31. FSDs that would like their ToC to be informed by recent thinking on applying complexity science to development interventions and FSDs should see the work undertaken by FSDK (Boulton and Johnson, 2013).

Figure 8 Example of a project’s results chain



*PSP = private service provider, CRS = Catholic Relief Services, CDN = Catholic of Ndola Diocese
 Source: Example from a savings group intervention by FSDZ;

Whereas in a logframe the relation between the different levels of results will not always be stated, the purpose of a results chain is to make this causality of change explicit, clear and measurable. Indicators are then chosen to closely correspond to the different results specified, ideally with milestones (forecasts) of how the indicators are expected to change, helping the FSD team to think through and communicate this logic (see Step 3). The section below will show how fairly straightforward results chains can (and should) be adapted to help identify and measure systemic change effects. However, as Table 7 indicates, results chains are not a panacea, and there are a number of poten-

tial pitfalls to avoid when setting out results chains for measurement purposes. Further, the level of resources devoted to articulating and measuring the results chain, should be comparable with its importance to the FSD.

From both a measurement and a design standpoint, being clear as to the additionality that an FSD intervention is bringing to the market is also important, in terms both of articulating the change that the FSD wants to see and of being able to measure an FSD’s contribution to broader market change (i.e. what would have happened to the market without the intervention) – see Box 6.

Table 7 Tips for setting out result chains

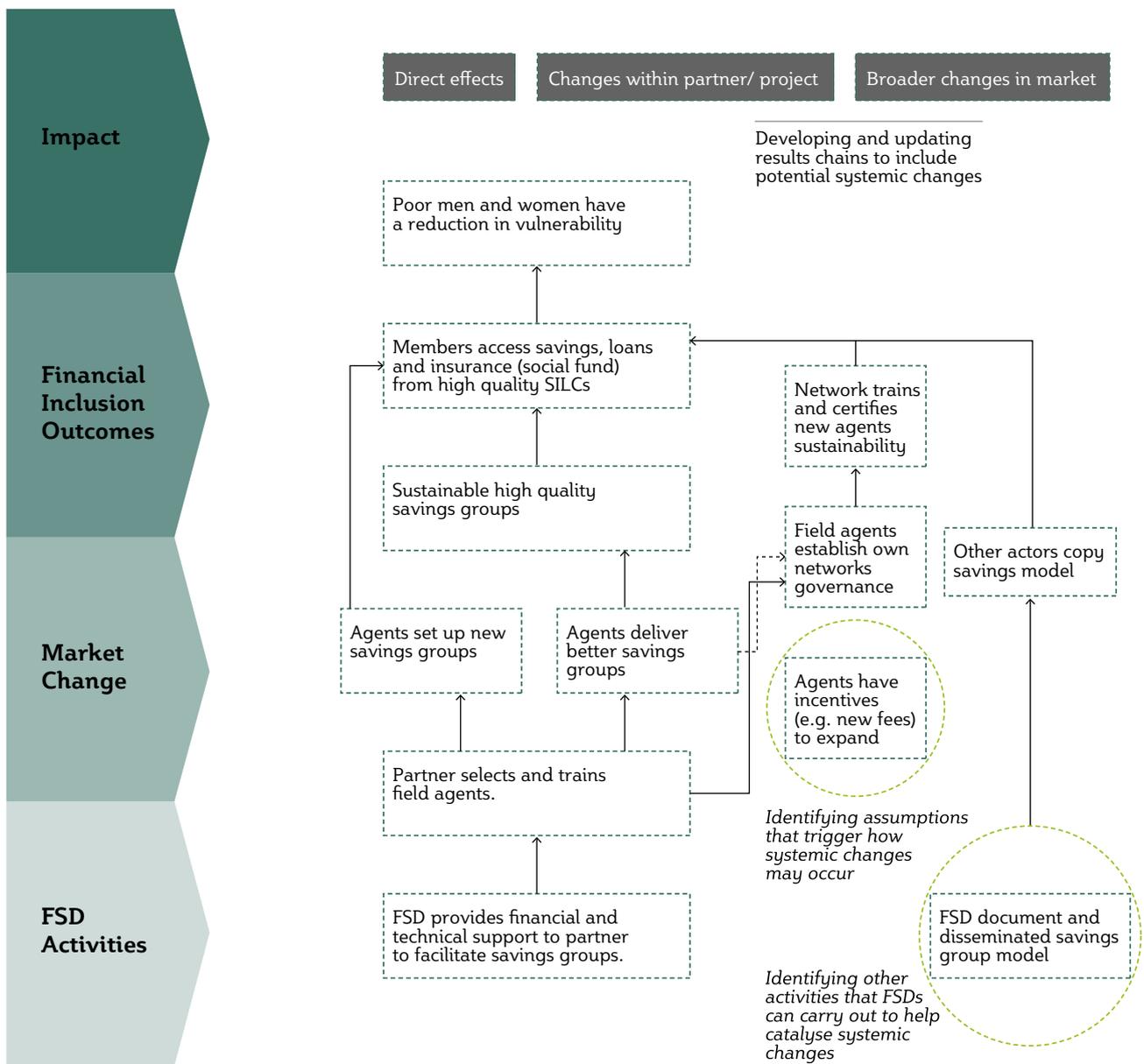
Challenge	Mitigation strategy (tips)
Project logic is not clearly set out	<ul style="list-style-type: none"> – Invest resources (e.g. a facilitated workshop) and seek the perspectives of others (e.g. government/private sector) when articulating/ confirming this logic – Ensure intervention logic at project level is consistent with the ToC at programme level – Avoid trying to capture too much information in one diagram (hence the use of nested approaches to results chains)
Numerous results chains become unwieldy	<ul style="list-style-type: none"> – Ensure that M&E staff and project managers work together to contribute to the design and updating of results chains – Prioritise flagship results chains: i.e. results chains that are more complex, account for a large part of the FSD impact and/or need substantial FSD resources
The project logic does not evolve	<ul style="list-style-type: none"> – Build in critical reflection points (e.g. quarterly and annual reviews) to test and update the ToC within the FSD team and with key FSD partners
The impact pathways are not detailed enough to really explain how outcomes/ impact will be achieved	<ul style="list-style-type: none"> – Indicators need to be mapped and tested against the results chain at each stage to assess if they remain relevant – Ensure that gaps between indicators at different levels, for example from outputs to intermediate outcomes, are not too large – Use available evidence globally to ascertain where specific gaps might exist with regard to how impact pathways might be working (and what data to gather) – Use additional studies to fill in gaps where required, especially in relation to understanding the causality between different links in the impact pathways
Measurement becomes too intervention-centric	<ul style="list-style-type: none"> – Use additional methods such as focus group discussions (FGDs) to obtain a reality check as a result of a range of perspectives. Compare with sector tracking results. (See Step 3 for further discussion.)

Box 6 Improving the contribution story: thinking about additionality in results chains

Additionality is typically considered as part of an FSD's investment decision and can help inform the project result's chain, by identifying what changes can result from the FSD intervention, and why these would not have occurred without the intervention (i.e. the FSD intervention was additional). The additionality analysis helps develop a robust contribution narrative of impact. Additionality can mean two things: first that the changes would not have occurred without the FSD intervention, or, secondly, that they would not have occurred as fast without the FSD in-

tervention. Development finance institutions (DFIs), like the International Finance Corporation (IFC) and the Dutch Development Bank (FMO), use these criteria to identify evidence of additionality in areas such as: if the financing they are offering has a longer term tenor or is provided in a more appropriate currency than what is currently being offered in the market; if their finance is mobilising other resources; and if their finance is not crowding out other sources of capital.

Figure 9 Results chain with systemic change



4.1.6 ‘Nesting’ ToCs and project results chains in the overall programme ToC

For simple projects or programmes it is possible for a single overall ToC to achieve a sufficient level of detail to be a useful basis for an impact evaluation. FSDs, however, have a large number, and different types, of projects and interventions that cannot be usefully represented in a single programme ToC. We therefore recommend a ‘nesting’ approach, which several FSDs have already adopted. This involves:

- An **overall programme ToC**, which summarises the overall logic of the FSD programme —the final impact that it aims to achieve and how broadly this is expected to take place. The programme ToC is used for developing high-level impact measurement questions and the overall narrative about the programme. The programme ToC can also provide a relatively simple snapshot, for FSDs to communicate their programmes to external stakeholders.
- Nested within this overall ToC, **thematic ToCs**, which show more detailed impact pathways for particular themes, such as digital financial services or SMEs or ‘enabling environment’. It is these thematic ToCs that will be useful for developing more nuanced impact measurement questions, providing a sufficient level of detail to serve as a conceptual and empirical framework for measurement.

This ToC also provides an indication of whether a new project is consistent with the objectives (and understanding) of the programme.

Tip: Whilst thematic ToCs provide an extra depth to FSD analysis for measurement, care should be taken to ensure that synergies between themes across the FSD programme are articulated where possible.

- Nested within these ToCs, **project results chains**, which provide even more detail about the impact pathways for individual projects. The measurement of project-level results is not the focus of this guidance (though see the guidance in Section 4.1.5), but results at this level will contribute to the evidence base about programme impact, and are particularly important for generating evidence of how interventions promote changes in the market (see Step 3).

Advice about how to nest thematic ToCs and project results chains within an overall programme ToC is given in Box 7.

Box 7 How to nest project results and thematic results in the programme ToC

For FSDs, the programme ToC will be less detailed than projects results chains and will focus more on the overall programme intervention logic from outputs to final impact, showing how systemic constraints are reduced to achieve financial inclusion, financial sector development and ultimately poverty reduction and/or economic growth. Some FSDs will also have thematic results chains (e.g. agricultural services or market information), which fall between the programme ToC and project results chains.

It is important that thematic ToCs and individual project results chains are consistent with the programme ToC, so that project-level evidence can be used as part of the programme-level impact evaluation.

Each project will work at a different level/distance from the programme impact. In practice, output/outcome/impact levels will have to be harmonised, i.e. even if a specific project’s outcome is X, in the programme ToC that outcome may be called an output.

For macro/meso level interventions, the advice is to align outcomes in the project results chain with the output level of the programme ToC (i.e. that of market change). Project impact will then be at the financial sector outcome level of the programme ToC (i.e. changes in the behaviour of market actors as a result of the macro or meso level change in the market). For most micro level interventions, which may have a more direct path to financial sector outcomes, the advice is to align outputs in the project results chain with the output level of the programme ToC (although additional performance indicators will be needed to assess if activities have been carried out as planned, for example how many people were trained etc.). Project impact will then be at the final impact level of the programme ToC.

Box 8 Step 1 checklist

- Set out programme, thematic and project ToCs/ results chains. Ensure that these are nested and aligned.
- Have you developed results chains for at least your key flagship projects?
- Have you explicitly set out the assumptions that link your ToCs/results chains?
- Can the relevant staff (and not just the results advisor) explain the ToC and results chain(s)?
- Identify the additionality of the overall programme and of specific themes (both before and after the programme implementation).
- Test your ToCs with informed outsiders, but only those who have not been closely involved in the development of the intervention logic but understand the overall context.
- For the purposes of measuring the programme impact, the programme ToC and thematic ToCs should be tested to confirm that they are clear, relevant, plausible, testable, context specific, and take proper account of the complexities of the financial environment in which your FSD is operating.
- Has systemic change been considered in developing the intervention logic, at programme and project level?
- Do you have processes/ systems to periodically check if these ToCs still accurately reflect the FSD interventions and are still evaluable? Keep good records of these processes/ systems, especially in cases where you need to adjust any ToCs or results chains in the light of new evidence.

4.2 Developing impact measurement questions (Step 2)

4.2.1 Overview

- Once the Programme ToC is agreed, the second task is to develop impact measurement questions. These questions should ensure consistency between an FSD (including its partners where appropriate) and its funders as to mutually agreed measurement priorities, and should orientate the IOM system to collect appropriate evidence.
- There are many issues to consider when developing impact measurement questions, including which impacts to focus on, and how answering the questions will inform decision-making.
- Questions can be formulated to aid top-down and bottom-up measurement processes.
- Once you have developed your questions, there will then be an iterative process of reviewing and revising them with stakeholders, but also checking that they can be answered practically, with available resources and at a reasonable cost.

4.2.2 Impact measurement questions

Step 2 focuses on the development of questions for assessing the impact of the programme, not individual projects. Much of the advice, however, can also be applied to the development of project evaluation questions.

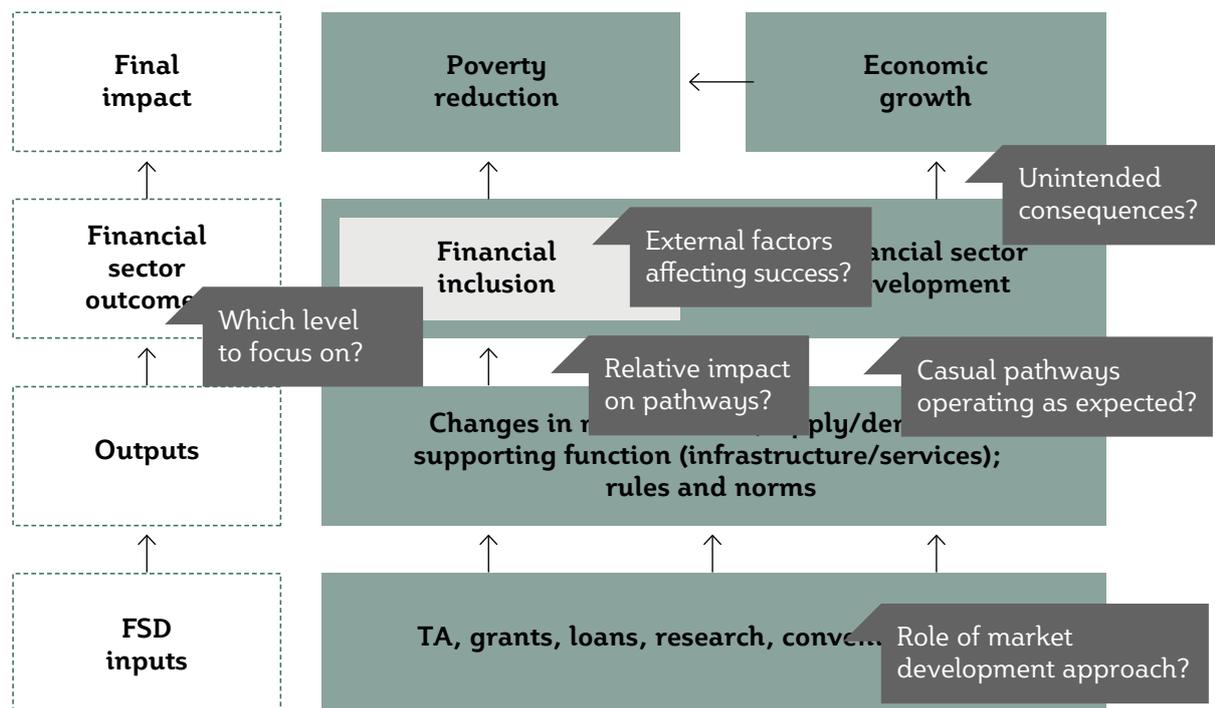
Identifying and prioritising the measurement questions is often a neglected part of the evaluation design process. These questions will be used to direct the focus of the evaluation of the programme's impact. **Measurement questions provide a crucial link between the FSD and its funders, helping to ensure a shared vision of what the FSD is trying to achieve**, as well as highlighting the practical challenges and opportunities from both an implementation and a measurement perspective. The questions will help to define the type of evidence the FSD wants to generate from the IOM system. These questions will focus the programme evaluation on specific aspects of the ToC, and will therefore determine the indicators that will be collected and additional analysis/studies that need to be conducted. The set of impact measurement questions should be addressed systematically during the periodic programme reviews and evaluations – see Step 7.

Tip: Taking time to think carefully about impact measurement questions will pay dividends and will help focus both measurement and research activities.

4.2.3 How to develop impact measurement questions

For this step we have mapped onto the stylised ToC some types of question that FSDs may want to consider asking about their impact (Figure 10). These questions are explained in further detail below.

Figure 10 FSD ToC and types of impact measurement questions



Questions should be developed in consultation with stakeholders and by considering the programme (and/or theme) ToC, with a clear understanding of what an FSD and its funders hope to achieve by answering these questions. Using the simplified ToC above as the framework, the next sections focus on the questions posed in the small black boxes in Figure 10. FSDs should therefore consider:

- **At what level do you want to assess impact?** E.g. at the financial sector outcome level, are you interested in your impact on financial inclusion, or financial sector development more broadly? Are you interested in measuring impact at the final impact level for the whole programme, measuring it for a sub-set of (micro) projects, or will you rely only on secondary evidence at this level?
- **Are causal pathways operating as expected?** Answering this question would involve examining if the overall logic of the programme is operating as expected, and would form the core of most impact evaluations.
- **Which impact pathways are the most critical to success?** Which ones are the most risky and/or which are less likely to work? In their review of M4P evaluations, Ruffer and Wach (2013) found that

the majority of evaluation questions were based on a ToC in which most questions did not adequately test the linkages contained in the theory. Effective TBE means you will need to ask (sometimes tough) questions about these linkages.

- **Are you interested in the relative impact of different types of interventions?** For example, are you interested in understanding whether your work with policy-makers or your TA to financial service providers was a more significant driver in unblocking a market constraint?
- Other key points have been discussed in Section 4.1 above, on Step 1. These include whether an FSD's programme is being implemented as envisaged in the ToC, capturing cross-cutting themes, identifying unintended consequences and the risks of a market development approach relative to one based on alternative options (i.e. using a counterfactual).

Stakeholder objectives for the impact evaluation should also be taken into account when developing questions. This could be accomplished by involving stakeholders in the discussion of the programme theory (perhaps through a facilitated workshop) or by asking them to comment on a set of draft questions. It will be particularly important to take funders' interests into account.

Tips for developing impact measurement questions

- **Formulate your questions as questions.** This may seem obvious, but so-called evaluation questions are sometimes just a set of issues to explore. Having an actual question helps define the focus of the evaluation and prompts you to think about how to collect and analyse data to answer it.
- **Be aware of language.** ‘*Did* the programme make a difference?’ indicates that a yes or no answer is required and implies that quantitative methods will predominate. In contrast, ‘*How and why* has the programme made a difference?’ indicates that the answer will be an explanation and implies that qualitative methods will predominate.

At the programme level, FSDs are not going to be able to answer an impact evaluation question phrased as follows: ‘What was the net impact of the programme?’ – because this requires a statistical comparison group, which, as discussed in earlier Chapter 3, will not be feasible for assessing programme-level impact.

If you are interested in the differential impact of the programme, you may also want to consider asking ‘for whom’ and ‘under what circumstances’.
- **Define the cause and effect that is of interest in your question.** In general, an impact evaluation question will try to relate the programme, or an element of the programme, to an effect. But as discussed below, the IOM recommends the use of both bottom-up and top-down focused questions.
- **Check that the questions are clear and concise.** It can help to develop sub-questions under your primary evaluation questions and, if the question is becoming too lengthy, to define key terms separately.
- **Prioritise and potentially eliminate questions** by assessing: a) stakeholder interest in the questions (especially FSD funders); b) their potential for providing new information that will influence the decision-making of stakeholders; and c) time, budget and skills implications.

4.2.4 Example of impact measurement questions

Figure 11 gives some indicative examples of impact measurement questions for FSDs, separated into top-down and bottom-up approaches: answers to both are required to provide a comprehensive narrative as to whether the ToC has held up in the light of the evidence. FSDs will, of course, need to adapt such questions to their own ToC and stakeholder priorities. Table 8 below highlights potential misconceptions regarding types of bottom-up/top-down questions, based on consultations with FSDs.

These figures and tables focus on measuring the cause and effect of relationships in the financial sector and FSDs’ contributions to them. However, there may be additional questions of the kind that are normally considered in traditional programme evaluations and that are not focused on impact (e.g. questions that focus on issues such as programme relevance, efficiency and broader learning). Nonetheless, the IOM guidance will provide FSDs with significant evidence to help answer such questions. For example:

- Which market segments have performed relatively better in terms of the FSD’s objectives?
- To what extent has the programme been implemented as envisaged by the programme-level ToC?
- How are market constraints being identified and how this is reflected in FSD actions?
- Are there any significant linkages between projects, and what (if any) impact do they have?
- Is the programme delivering VfM?

Figure 11 Examples of impact measurement questions

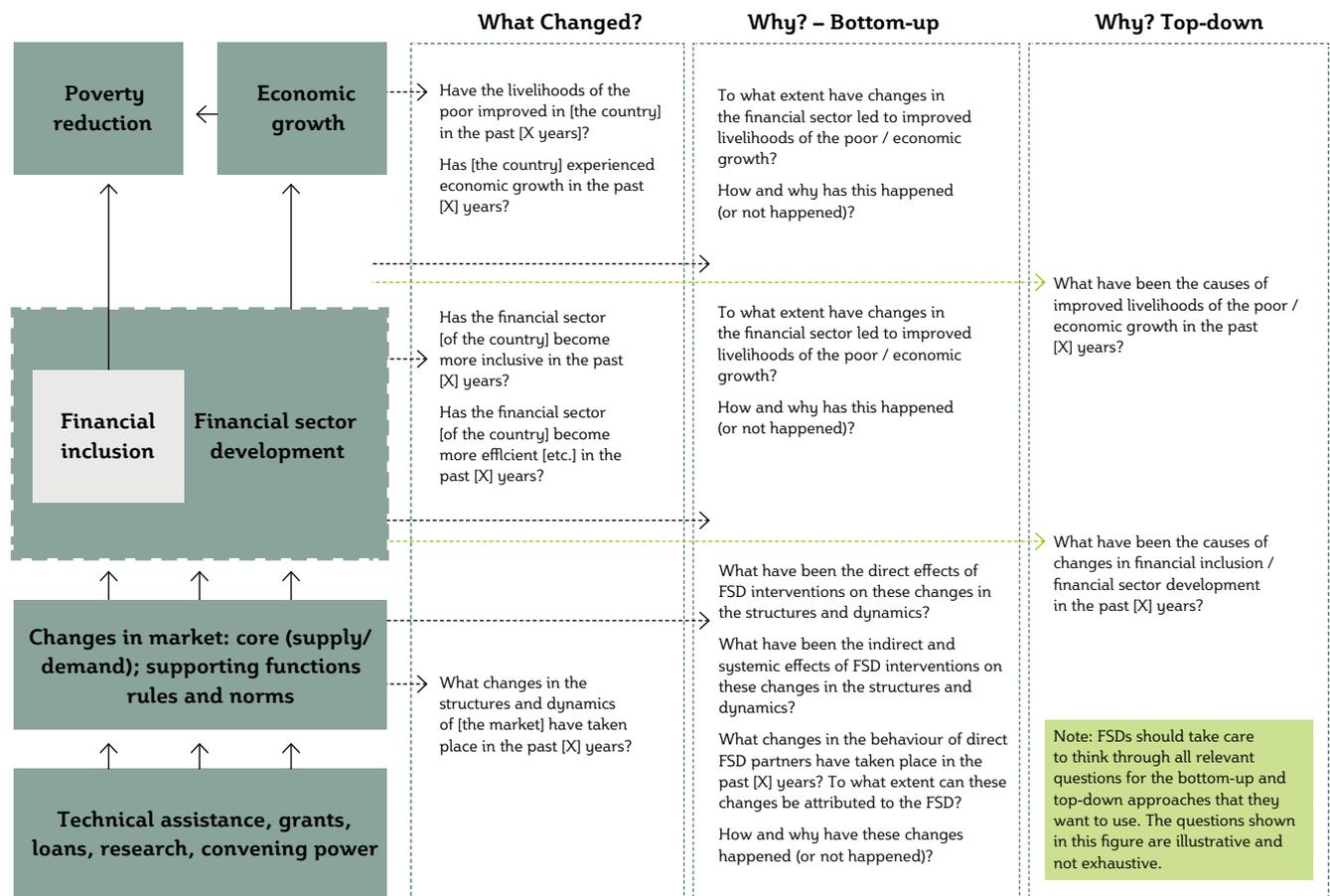


Table 8 Programme-level top-down and bottom-up impact measurement questions – good and bad examples

	Good examples	Bad examples (with explanation)	Ambiguous (with explanation)
Bottom-up	<ul style="list-style-type: none"> – What has been the contribution of the FSD programme to the observed changes in market competitiveness and efficiency? – How have FSDs contributed to enabling policy changes that promote the growth of mobile money services for the poor? 	<ul style="list-style-type: none"> – To what extent will gaining access to financial services improve livelihoods? <p><i>(More of a top-down question, as it is focused on how livelihoods have been influenced by (all the) changes in the financial sector, with no focus on the FSD programme)</i></p>	<ul style="list-style-type: none"> – What has been the contribution of changes in the structures and dynamics of the market to changes in financial sector development <p><i>(Could be both bottom-up and top-down; market changes are often measured in terms of how FSD programmes have caused them, although this more open question would provide the evaluator with the opportunity to explore many non-FSD contributions)</i></p>
Top-down	<ul style="list-style-type: none"> – To what extent has growth been driven by finance? – What have been the main causes of changes in financial inclusion in the past [10] years? 	<ul style="list-style-type: none"> – Is FSD programme a key driver of financial sector development in the past [x] years? <p><i>(This is more of a bottom-up question focusing on how an FSD programme has driven change in the sector)</i></p>	<ul style="list-style-type: none"> – What changes can be tracked to an increase of mobile money? Is there any contribution from FSD interventions? <p><i>(The first part of this question could be top-down but the second part is bottom-up, focusing on how an FSD programme has driven change. It would be better to split this into separate questions)</i></p>

Source: Adapted from March 2015 FSDA workshop exercise

An example of the application of this approach is provided in Figure 12 and Table 9 below, which set out impact measurement questions for an indicative the-

matic ToC of an FSD programme that is working on the enabling environment.

Figure 12 Indicative example top-down and bottom-up impact measurement questions

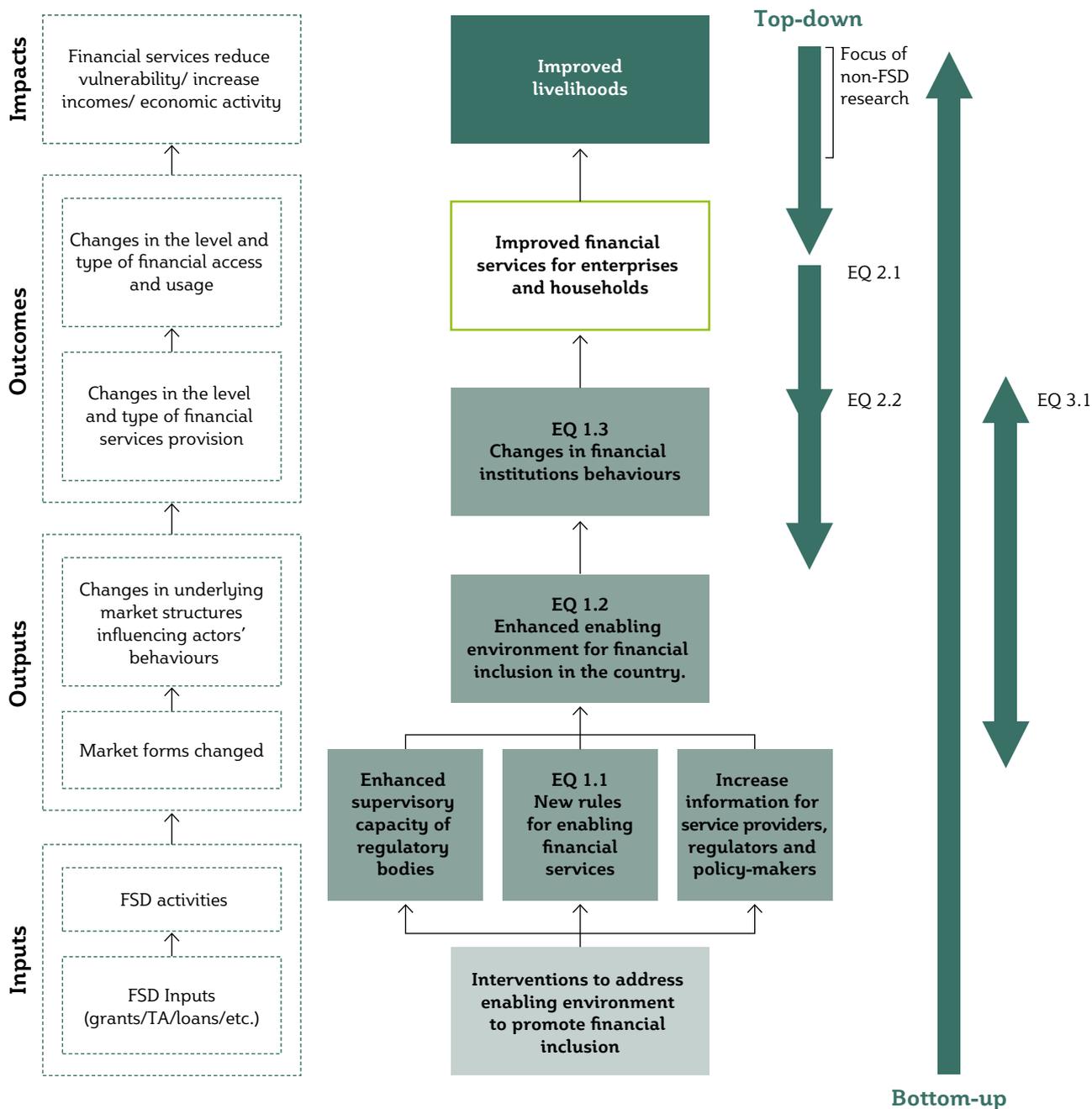


Table 9 Bottom-up and top-down impact measurement questions and methods (indicative example)

Type of evaluative approach	Impact measurement questions	Indicative measurement methods (See Steps 3–5)
Bottom-up: From intervention to market system change (and outcomes) ³²	EQ 1.1 What have been the direct outputs from FSD interventions? (or signs of progress, such as behaviour changes, towards these outputs)	– Intervention monitoring data – Key informant interviews and FGDs
	EQ1.2 What changes have occurred in the enabling environment for financial inclusion?	– Intervention monitoring data – Enabling environment surveys
	EQ1.2 To what extent can these changes be attributed to FSD?	– Key informant interviews and FGDs – Case studies
	EQ1.2 What other causal factors have there been?	– Political economy analysis
	EQ1.3 To what extent have these enabling market changes led to improvements in the inclusiveness of the system? (i.e. through changing institutions' behaviours)	– Key informant interviews and FGDs – Institutions' published information – Supply-side studies
Top-down: Changes in financial outcomes (behaviour of financial institutions and level and appropriateness of financial services)	EQ 2.1. How have the level and composition of financial services changed (in the relevant sector, given the enabling environment changes)?	– Demand-side studies – Supply-side studies
	EQ 2.2 What market system changes led to the changes in financial inclusion?	– Key informant interviews and FGDs – Supply-side studies
	EQ 2.2 What have been the causes of any changes in the enabling environment?	– Case study approaches – Outcome harvesting – Most significant change
Credible narrative: Linking market changes (and outcomes of those changes) to the FSD's interventions	EQ 3.1 To what extent can the market-level changes observed in top-down answers be attributed to FSD interventions?	– Findings from Steps 1 and 2 – Synthesis and triangulation – Contribution analysis

There is no set rule regarding when the top-down and bottom-up measurement questions should meet (see footnote 33), and where synthesis measurement questions are most useful. **The choice of questions will depend on what is sensible for that ToC (or individual result chain), as well as on what the limits are in terms of gathering evidence for bottom-up and top-down assessment.** Even for micro interventions, where one can obtain good bottom-up data all the way to the financial inclusion level, FSDs still need to assess what market system drivers are supporting that inclusion. This provides a way of checking that it is not just the FSD project that is having a direct impact, which may be unsustainable in the long term, but that underlying market drivers have also changed.

Discussion point: During the second IOM consultation workshop (March 2015) funders encouraged FSDs to think about the IOM at the start of the programme/strategy period. They stressed the difficulty in retrospectively evaluating existing programmes, where there is no budget, no baseline, no ex-ante evaluation objectives, and limited data, with it being particularly hard to demand this from private sector actors after a project has finished.

32. It is more likely that direct outcomes from projects, in terms of provision and usage of financial services, will be captured for micro-level projects rather than for those operating at macro level, given the results chains are longer and more diffuse (suggesting that bottom-up measurement may go further than this illustrative example for some micro projects). However, even for micro projects,

whilst measuring those directly impacted (for example through investing in savings groups) it is still important to assess how the underlying dynamics of informal finance markets are changing (hence top-down measurement will still be relevant, in order to develop a comprehensive picture).

Once you have identified and prioritised your impact measurement questions, using an evaluable programme ToC as your framework, you are ready to start thinking about how to measure your impact. **The evaluation matrix template shown in Table 10 below will be a useful tool for summarising your evaluation questions and how**

you are planning to answer them. An FSD programme should be able to complete the first two columns even before the strategy implementation starts. The remaining columns will be completed using the guidance in Chapter 5 of this paper (which deals with Stage 2).

Table 10 An evaluation matrix template (with indicative example)

Evaluation question	Sub-question	Indicative indicators	Data collection methods	Data analysis methods	Evaluability issues
Bottom-up: To what extent has the FSD contributed to an improved enabling environment?	How have FSD projects affected policy-making?	<ul style="list-style-type: none"> – Number of organisations demonstrating improved effectiveness in advocating for financial sector reform – Number of policy-making bodies engaged by FSD with improved capacity to formulate and implement effective financial sector policies and regulations – Attitudes to financial inclusion changing amongst policy-makers 	<ul style="list-style-type: none"> – Intervention-based monitoring data – Capacity index³³ – Key informant interviews – Case studies – Supply-side studies 	<ul style="list-style-type: none"> – Compilation of interview and questionnaire responses – Analysis of case studies – Cross-checking of supply-side findings with primary data collection 	<ul style="list-style-type: none"> – Key informant interviews conducted with only five organisations, limiting the extent to which information can be triangulated for all

[Based on the example above, additional sub-questions and their respective indicators and data methods would be included here by the FSD team. Additional examples of indicators are provided in Section 5.1 and Annex D]

Box 9 Step 2 checklist

- Have you identified which impact pathways are likely to be the most critical to success, and discussed these with the funders?
- Decide on the level at which you want to evaluate impact (i.e. financial inclusion, financial sector development, economic growth, or livelihoods), and the extent of resources you are willing to devote.
- Have you considered other important criteria (e.g. changes in the wider market, understanding the market development modality you are using or cross-cutting themes such as a gender, geography or youth) that the FSD programme and its funders are interested in? However, be pragmatic regarding how many core questions your IOM can focus on.
- Formulate top-down and bottom-up questions for programme and thematic ToCs (and subsequently for flagship projects). Will these act as useful and feasible measurement questions?
- Do these key questions need to be agreed with funders?
- Decide on how far down top-down questions should go, and how far up bottom-up ones should go (although you should note that this may change as the quality of the evidence base for each causal pathway becomes clearer).
- Determine which questions will require what types of evidence – from monitoring data (see Steps 3 and 4) to types of causality analysis (see Step 5 and 6). Be explicit about which questions are primarily useful for measuring impact, as opposed to those contributing to broader learning.
- Develop and start to fill in your evaluation matrix (see Steps 3–5 to help develop this).

33. For example, a questionnaire that is able to judge if capacity in an institution is improving over time.

Annex B Developing a programme ToC

There is much existing guidance on how to develop a ToC, and therefore this is not specified in detail here. One of our favourite resources is the book *Purposeful Program Theory: Effective Use of Theories of Change and Logic Models* by Sue Funnell and Patricia Rogers. The DCED Standard also draws on this book in its results chain guidance.

As discussed, ToC is both a process and product. Funnell and Rogers (2011) suggest the following key questions to ask yourself when you are designing the process.

Funnell and Rogers (2011) also suggest three key activities to inform the development of a ToC. These are provided in Table 35, again with application to FSDs.

Table 34 Key questions for designing a ToC process

Question	Application to FSDs
Who should be involved in developing a programme theory, and in what capacity?	<p>Who will take a lead role? FSD director, M&E adviser, external evaluator?</p> <p>Who else will participate? FSD staff, FSD board, funders, other partners, funded projects, external evaluator, financial sector experts?</p> <p>And in what capacity? e.g. source of information or participant in discussion?</p>
What is an appropriate mix of approaches for developing a programme ToC, and how to go about it?	<p>Stakeholder mental models? Which stakeholders to ask? In a group or individually?</p> <p>Deduction? e.g. market diagnosis and programme documentation, the wider research literature on financial inclusion; economic growth and poverty reduction?</p> <p>Induction? e.g. observe the programme in action; interview staff and other stakeholders.</p>
How might workshops and interviews be used in developing the programme theory?⁹⁴	<p>Workshop or interviews? With whom? Or a combination of the two?</p> <p>Which theory? Should stakeholders be asked to describe how they think the FSD is supposed to work, or how it actually works?</p>
When is it time to revisit programme theory?	<p>Strategy review? More frequently – say every three years? At the time of M&E system development? When appointing a new FSD director?</p> <p>We recommend that, at the very least, the programme ToC be reviewed every year, and in-depth at the end of a strategy period.</p>

Source: Adapted from Funnell and Rogers (2011)

Table 35 Key activities for developing a ToC

Activity	Further details	Application to FSDs
Situation analysis: understanding the problem, its causes, and its consequences	Identify the nature and extent of the problems or opportunities to be addressed; identify the known causes and consequences of the problem.	<p>This is integral to the M4P approach and so FSDs will have already done this in their programme design.</p> <p>The complexity of market systems requires that intervention is guided by a good understanding of specific market systems, including a diagnosis of the symptoms and causes of underperformance.</p> <p>M4P interventions require a strong emphasis on information gathering and interpretation – not out of academic interest, but to shape design, ascertain prospects for sustainability and guide actions throughout the course of intervention.</p>
Focus and scope	Set boundaries around the programme: which aspects of the problem – its causes and its consequences – are readily defined and acted upon; which are obscure but are within the scope of the intended programme; and which are outside an FSD programme’s scope.	This could include: (a) what the role of the FSD should and should not be in terms of the impact it wants to achieve; (b) which market interventions the FSD programme is best suited to implement; (c) in regard to which market interventions is it most ‘urgent’ to achieve impact; and (d) which ones are likely to be the most important? Are these the same?
Outcomes chain	Show the hypothesised cause-and-effect relationships between immediate and intermediate outcomes and ultimate outcomes or impacts.	FSDs should also try, as far as it is possible (given the resources and levels of complexity), to identify as many as possible of the other major factors likely to affect outcomes and impacts, together with any foreseeable unintended consequences.
Focus on systemic change	Discussion should also focus on the types of systemic change that might occur. As Ruffer and Wach (2013) state, the ToC must clearly define the system to be changed.	Defining the financial system of interest and the assumptions regarding the ways in which this systemic change will be realised.

Source: Adapted from Funnell and Rogers (2011)

About this guidance document

This assignment was commissioned by FSD Africa to facilitate peer learning among the nine FSDs in Africa, help them adopt more robust approaches, and develop a crisper message across the FSDs in regard to both measuring and reporting their results. This assignment has been facilitated by an OPM core team (Sukhwinder Arora, Sarah Keen, Ian Robinson, Robert Stone and Richard Williams). The OPM team was supported by a panel of experts including Thorsten Beck, Susan Johnson, Celina Lee and Alan Roe. The OPM team has also greatly benefited from frequent consultations with and guidance from FSDs, FSDA and CGAP teams. Contributions, especially from Mark Napier, Joe Huxley, Mayada El-Zoghbi, Karina Nielsen and Krisana Pieper are greatly acknowledged. Once this core assignment is completed by OPM in January 2016, FSD Africa seeks to work with DFID and the FSD Network in Africa to support its implementation and periodically review and update the guidance.

About FSD Africa

Financial Sector Deepening Africa (FSD Africa) is a non-profit company, funded by the UK's Department for International Development, which promotes financial sector development across sub-Saharan Africa. FSD Africa operates as a catalyst for change, working with partners to build financial markets that are robust, efficient and, above all, inclusive. It uses funding, research and technical expertise to identify market failures and strengthen the capacity of its partners to improve access to financial services and drive economic growth.

FSD Africa is also a regional platform. It fosters collaboration, best practice transfer, economies of scale and coherence between development agencies, donors, financial institutions, practitioners and government entities with a role in financial market development in sub-Saharan Africa. In particular, FSD Africa provides

strategic and operational support to the FSD Network. FSD Africa believes that strong and responsive financial markets will be central to Africa's emerging growth story and the prosperity of its people.

About the FSD Network

Today, the FSD Network:

- Comprises two regional FSDs – FSD Africa based in Kenya (est. 2013) and FinMark Trust based in South Africa (est. 2002) – as well as seven national FSDs, in Kenya (est. 2005), Moçambique (est. 2014), Nigeria (est. 2007), Rwanda (est. 2011), Tanzania (est. 2005), Uganda (est. 2014) and Zambia (est. 2013);
- Is a world-leading proponent of the 'making markets work for the poor' approach;
- Specialises in inclusive financial sector development, through interventions such as SME finance, agriculture finance, housing finance, savings groups and digital financial services. A number of FSDs are starting to explore financial sector development for growth, through capital market development interventions such as secondary stock exchange development, capacity building and skills development;
- Represents a collective investment of \$450+ million by DFID, the Bill & Melinda Gates Foundation, SIDA, DANIDA, Foreign Affairs, Trade and Development Canada, Royal Netherlands Embassy and the World Bank;
- Spends \$55+ million per year, predominantly through grant instruments; and
- Employs over 100 full-time staff across sub-Saharan Africa and uses a wide range of specialist consultants.



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