FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

Feed the Future Mozambique Agricultural Innovations Activity (FTF Inova)

MONITORING, EVALUATION, AND LEARNING (MEL) PLAN

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USAID

FROM THE AMERICAN PEOPLE

Prepared for the United States Agency for International Development (USAID) by:
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Table of Contents

List of Figures and Tables

Figures

Tables

Acronyms

ADS	Automated Directives System
BII	Business Model Innovation Index
CDCS	Country Development Cooperation Strategy
CLA	Collaborating, learning, and adapting
COP	Chief of Party
COR	Contracting Officer's Representative
CRM	Customer relationship management
DQA	Data Quality Assessment
FGD	Focus group discussion
FTF	Feed the Future
FTF Inova	Feed the Future Mozambique Agricultural Innovations Activity
FY	Fiscal year
GRM	Government of the Republic of Mozambique
IMP	Intervention monitoring plan
KII	Key informant interview
M&E	Monitoring and evaluation
MEL	Monitoring, evaluation, and learning
MSD	Market systems development
PIRS	Performance Indicator Reference Sheets
PMP	Performance Management Plan
PPI	Poverty Probability Index
SHF	Smallholder farmer
USAID	United States Agency for International Development
USG	United States Government
WEE	women's economic empowerment

1. Introduction

1.1 FTF Inova Objective

The United States Agency for International Development (USAID) funds the Feed the Future Mozambique Agricultural Innovations Activity (FTF Inova) to stimulate more inclusive agricultural markets for farmers.[1] FTF Inova runs for five years, with a budget of nearly $21 million.

FTF Inova's overall goal is for **sustainable, agriculture-led economic growth**, which is critical to reducing poverty and hunger. The aim is to contribute to this change by catalyzing more **inclusive and competitive agricultural market systems**:

- Market systems are more ***inclusive*** when market actors have strengthened and expanded access to markets and trade opportunities, which they pursue and benefit from, thereby increasing the value and volume of sales of both the buyers and the producers. Inclusivity also refers to the extent to which traditionally marginalized actors like smallholder farmers (SHF), especially those who are young and/or females, are engaged in and benefitting from the expansion of markets and trade.
- Market systems are more ***competitive*** when market actors can adapt effectively to sell products that meet demand requirements (price, quality, quantity) and, at the same time, ensure profits over time that enable market actors in the system to thrive. Competitiveness is not determined by the number of market actors, but by how well the market actors are able to face competition, incrementally innovate their business models, and be successful when facing competition.

1.2 Purpose of MEL

Monitoring, Evaluation and Learning (MEL) plays a crucial role in FTF Inova. The MEL System supports the strategic and informed management of interventions, while allowing FTF Inova to report on achieved results. The System is built along two lines:

1. Technically rigorous methods to capture and report results externally, including to USAID; and
2. Robust but rapid tools and processes that support evidence-based decision-making within FTF Inova.

MEL therefore has the twin goals of both "proving" and "improving" impact.

1.3 Revised MEL Plan

This Plan sets out FTF Inova's MEL System and explains how results are monitored and measured. The Plan is intended primarily as an internal document and as a guideline for teams involved in the design, implementation, and management of interventions.

The purpose of this updated Plan is to emphasize how MEL is the "data engine" for FTF Inova's approach to adaptive management and learning. The Plan includes definitions of key indicators, monitoring and evaluation (M&E) methodologies and processes, and a framework for reporting on progress toward results.

[1] USAID awarded FTF Inova (contract number AID-656-C-17-00001) to DAI Global, LLC on February 22, 2017. FTF Inova has a budget of $20,971,049 and is to be completed by February 22, 2022. DAI leads the implementation, supported by TechnoServe, Ecoventures International and MarketShare Associates.

2. Approach to Implementation

2.1 Market Systems Approach

A *market system* refers to the arrangement of actors (organizations and individuals) who produce and exchange a similar type of product, good, or service, or provide various market-supporting functions, such as access to information or finance. The actors operate within a set of formal rules and informal norms that shape their behaviors and influence the overall performance of the system.

Market Systems Development (MSD) programs aim to catalyze *systemic changes,* which are changes in the way core functions of supply and demand, supporting functions, and rules perform to ultimately improve the participation of target groups (such as people living in poverty, youth, marginalized groups, etc.) within the market system.

2.2 Navigating Complex System Dynamics

In a market system, market actors—called "agents" in systems language[2]—may behave (e.g., collaborate, coordinate, and/or compete to produce, distribute, and consume goods and services) based on the influence of other agents and the rules, incentives, and norms of the operating environment. Behavior, however, is not static; therefore, complexity emerges out of patterns of interactions between dynamic agents.

While the behavior of individual agents may look simple when examining them one by one, taken together, the sum of these behaviors acquires new properties that are often difficult to discern. The phrase *the whole is greater than the sum of its parts* is apt when, for example, individual actors may each be seeking to make money, but together their interactions create a volatile market where prices can go up and down unpredictably. This volatility, in turn, governs the behavior of individual actors and their seemingly independent decisions.

There are a few basic characteristics of complex adaptive systems that require us to look beyond the agent-level in efforts to understand—and change—market systems:[3]

1. Systems are composed of agents.
2. Agents interact with each other.
3. These interactions produce dynamics which give rise to an "emergent" pattern of behaviors that is more than the sum of agent behavior.
4. These system-level, emergent patterns of behavior influence agent behaviors, and vice versa, in a phenomenon known as "coevolution."

To help navigate the diverse interactions and patterns of behaviors, we find David Snowden's Cynefin Framework helpful. Working in the Cynefin framework's "complex" zone, as depicted in Figure 1 below, means there is "low certainty, low agreement" about how to intervene.[4] In situations of low certainty, even experts are uncertain about the best way to achieve results. With low agreement, key stakeholders disagree about which results are desirable. This makes it difficult to identify solutions and draft detailed implementation plans with precise cause-and-effect relationships in advance. Instead, complexity responds

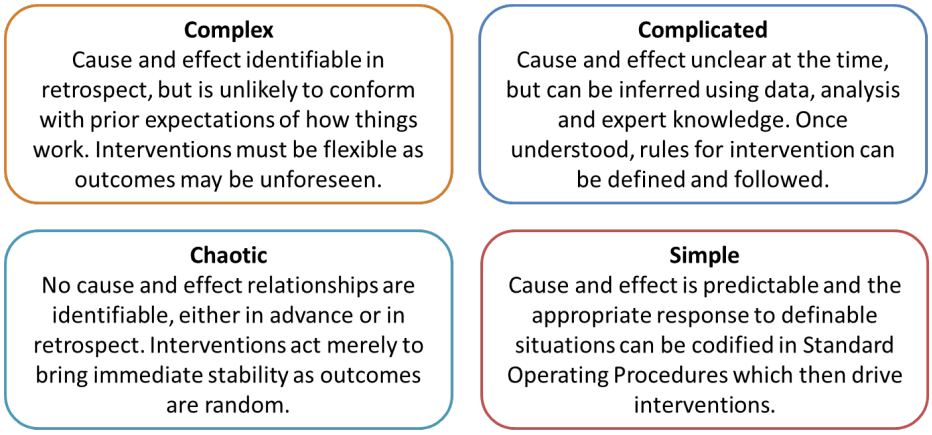
[2] Agents include individual market actors/players—such as farms, firms, households; the institutions that shape exchange, such as government; as well as formal networks, such as associations.

[3] USAID LEO Report No. 47 Disrupting System Dynamics: A Framework For Understanding Systemic Changes, October 2016, page 6. https://www.marketlinks.org/library/disrupting-system-dynamics-framework-understanding-systemic-changes

[4] USAID Office of Learning, Evaluation and Research. (2018). Complexity-Aware Monitoring Discussion Note (Brief). Retrieved from https://usaidlearninglab.org/library/complexity-aware-monitoring-discussion-note-brief.

well to adaptive management approaches in which development practitioners experiment, gather information, and then act accordingly.

Figure 1: The Cynefin Framework



2.3 The Agricultural Market Systems in Mozambique

FTF Inova focuses primarily on private-sector actors in Mozambique's agricultural markets. Using a market systems approach allows us to consider a wide range of system dynamics, incentives, social norms, and interconnected services and to identify those farmers, especially smallholders, who are not optimally connected but have the potential to improve their performance and position if linked to growth-oriented markets.

FTF Inova uses the Agricultural Market Systems Change Wheel[5] (Fig. 2) to focus on facilitating behavior changes in five sub-systems:

- *Core market systems* (the inputs distribution network system and the supply chain management system)
- Systems that act as *counterbalances and reinforcements* to change that takes place in the core market systems (the support services systems, business services systems, and interconnected systems).

Figure 2: The Agricultural Market Systems Change Wheel

[5] The USAID Feed the Future (FTF) Agricultural Value Chain activity in Bangladesh designed an Agricultural Market Systems Change Wheel, which can be retrieved from http://www.msdhub.org/agricultural-market-system-change-wheel.html

While FTF Inova's ultimate goal is clear—to catalyze more competitive and inclusive markets—the precise pathways toward market systems change are uncertain because of the complexity and "thinness" of the agricultural markets in Mozambique.[6]

Rather than chart *in advance* the multiple potential causal pathways that may lead from interventions to outcomes (since there is low certainty and low agreement on what will work), FTF Inova's approach is based on real-time *hypothesis testing*, which involves setting out an initial "big picture" vision and ideas for change, supporting innovations, and tracking how these are moving towards the vision. The current over-arching vision is that:

> Innovations that build alliances between farmers and other actors in the core of the agricultural market system will contribute to equitable economic growth, provided that they are also underpinned by services and functions that are rooted in other parts of the market system.

The vision also directs FTF Inova's focus to the core of the agriculture market system—input distribution (selling farmers what they need to farm) and supply chain management (buying produce from farmers). Innovations in these two areas, however, must often be underpinned by services and functions that are rooted in other markets. For this reason, FTF Inova's portfolio is more holistic, and it includes interventions in all five areas of the Agricultural Market Systems Change Wheel.

In practice, this translates into a strong emphasis on facilitating the emergence of business practices pivoted around building longer-term and less opportunistic interactions between market actors and smallholder farmers, which we call *relationships*.[7]

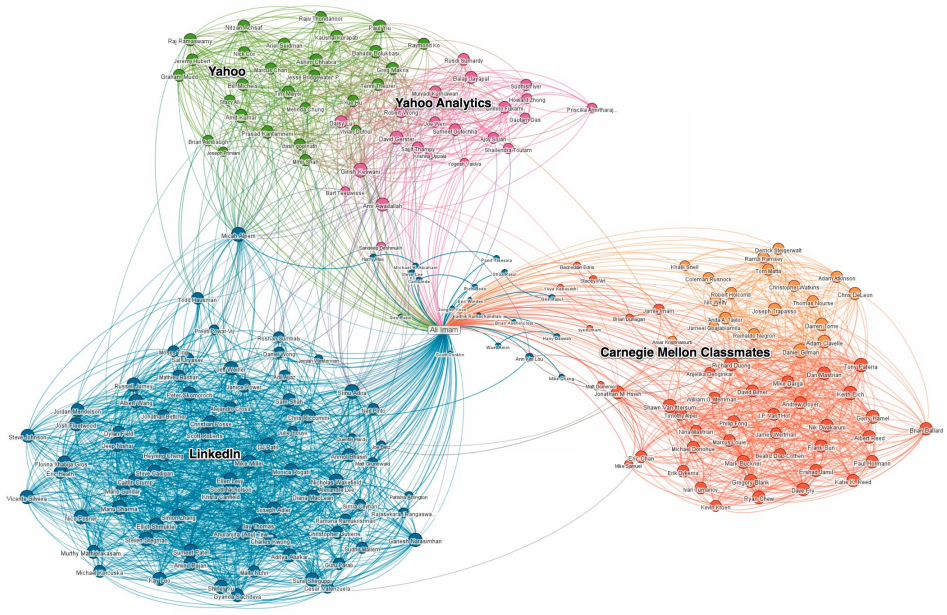
The interactions between actors playing particular roles form a complex web, especially when considering the dynamics of the relationships and differences in access to resources. See Figure 3 for an example of a complex network map of professional contacts of one user of LinkedIn.[8]

[6] In thin markets, limited numbers of entrepreneurial growth firms—companies growing faster than their peers or the broader economy—have difficulty finding and transacting with each other at reasonable costs.

[7] FTF Inova interprets a "relationship" to be a succession of long-lasting, repeated interactions equipped with characterizing properties, such as reciprocal trust and mutually beneficial gains.

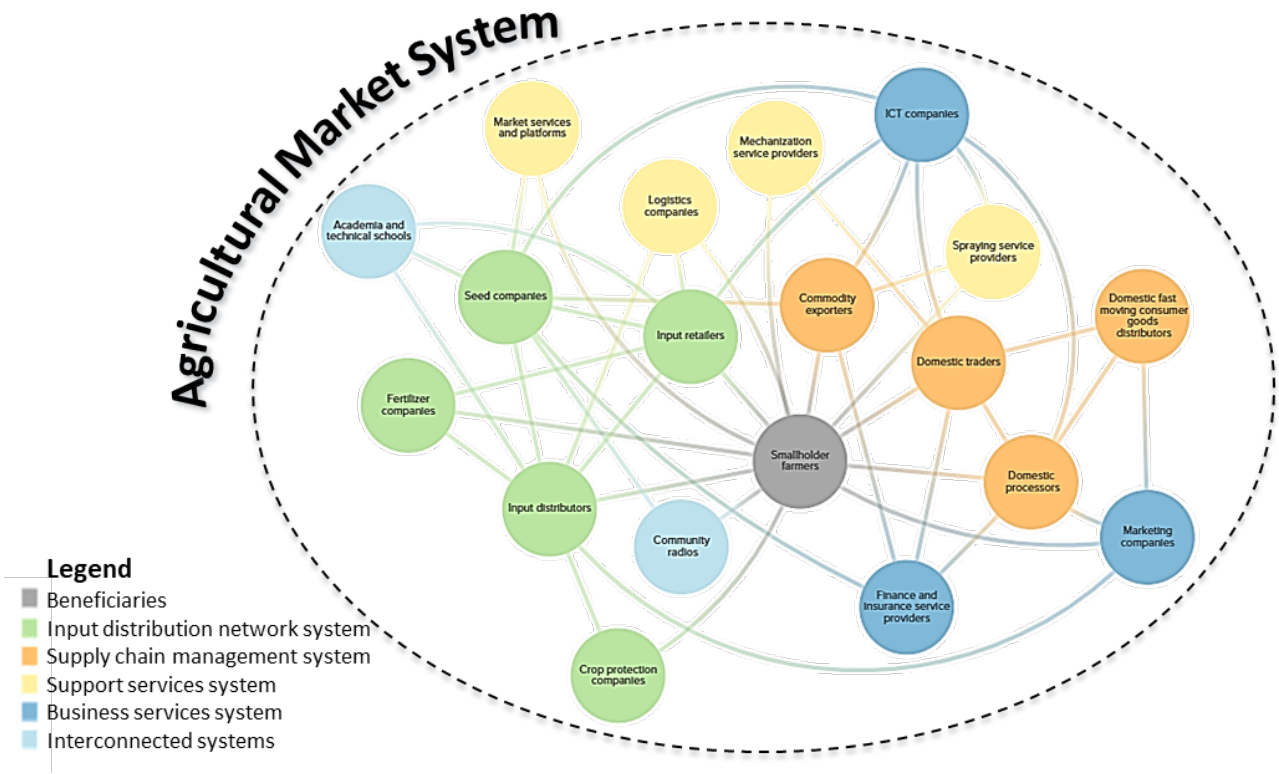
[8] This map, from https://blog.linkedin.com/2011/01/24/linkedin-inmaps, shows all the professional connections that one employee of Yahoo had as of 2011. His colleagues working at Yahoo Analytics are pink and others who work at Yahoo are green. His classmates from Carnegie Mellon are orange and tangerine. The larger circles represent people who are most connected on LinkedIn within a specific cluster or group. The primary hubs and bridges between groups may represent potential influencers for more business opportunities for himself or for facilitating professional opportunities for someone else. See link for more about LinkedIn maps to visualize social capital: http://socilab.com/#home

Figure 3. A Complex Network



For FTF Inova, the interactions of the Agricultural Market Systems are akin to those in the complex network in Figure 3. The network has a large number of agents (circles) connected by the lines, which overlap and cross each other and also create a confusing visual. To help the reader see relevant connections we have simplified and visually depicted FTF Inova relationships in Figure 4, below. This provides a stylized depiction of the overall agricultural market system, with the five focus sub-systems according to the wheel (recall Figure 2). At the center of each sub-system are market actors, who assume certain roles (identified by the circles) within a network of various types of relationships (the lines connecting the circles). The framework treats the relationships existing between different sub-systems with equal importance to the interactions within each sub-system.

Figure 4: Agricultural Market System and Network Map



To summarize, the Mozambican agricultural markets are thin, with few or nonexistent supporting services. While the donor community is saturated with organizations providing direct support and substantial grants to agriculture, FTF Inova takes a different approach by facilitating innovation—particularly with strategically well-positioned actors—to catalyze broad system changes that improve competitiveness and inclusivity. FTF Inova focuses on interventions that will facilitate systemic shifts in interactions and transactions between market actors, reorienting business strategies from narrow focuses on short-term profit and spot transactions to longer-term relationships, enhancing growth and shared value.

Assumptions and Risks

While FTF Inova does not follow a traditional Theory of Change approach, we recognize that there are conditions important to success but outside of our control. Some of these are detailed in USAID Mozambique's Country Development Cooperation Strategy (CDCS), particularly the following:

1. Extractive industry production stays within market projections.

2. Regional stability holds (especially in South Africa and Zimbabwe).

3. Natural disasters do not seriously offset current priorities and budgets. (Severe flooding is anticipated and budgeted for relief through the Office of U.S. Foreign Disaster Assistance, but a severe cyclone or other event of similar magnitude is not).[9]

While FTF Inova is working to identify private sector opportunities that incentivize the long-term benefits of inclusive market systems, the financial commitments of partner firms and other stakeholders in the public, private, and civil society sectors rely on **the assumption that economic conditions continue to improve for private sector investment.**

2.4 Probes

To navigate complex change pathways, FTF Inova has developed a sense-making technique known as ***probing***. Probes are rooted in the Cynefin framework (see Fig. 1 above) and allow FTF Inova to facilitate positive changes towards more inclusive relationships and market expansions. Probing is a rapid and flexible way to explore possible pathways to improving market system performance. Each probe is both a concrete change as well as an opportunity for structured learning. More specifically, a probe is comprised of three elements: **the What, the How**, and **the Why**. Probes are defined in relation to FTF Inova's vision and the interests expressed by individual agents in the system—the market actors who become FTF Inova partners. Each probe is an opportunity for innovation and learning.

FTF Inova Probing Technique

The *What*: A potentially catalytic innovation, such as a new product, service or business practice adopted by a market actor. For example, in the supply chain market system, a probe might be the following:

The use of non-financial reward schemes can improve trust and reduce conflicts/disputes between smallholder producers and buyers of agricultural produce.

The *How*: The co-creation process of how FTF Inova defines and adapts the innovation together with the partner market actor.

The *Why*: The learning objective attached to the innovation, geared towards measuring *sustainability* over the long term, the *value* delivered to SHFs, and the potential to *scale* in the market.

For instance, the probe in the textbox at right posits that non-financial reward schemes **(the *What*)** can improve trust and reduce conflicts/disputes. **The *How*** of probing is described in detail in the fiscal year (FY) 2019 Annual Work Plan as part of the partnership approach. In short, FTF Inova portfolio managers work with the market actor to co-create solutions and support new or improved behaviors in line with probes of interest (defined and adapted by the partner in conjunction with FTF Inova portfolio managers). For example, a partner may have a business idea that by giving some sort of reward (like a prize, gift, or voucher), they may encourage farmers to not only produce better, but to not side-sell, which is a major concern throughout supply chain management system. Another private-sector partner may have an idea to offer opportunities for those farmers that meet certain production criteria (like chances to lead or mentor others), or it may want to provide recognition to top performers (like presenting them with new input supplies or equipment, an award, a special meal, etc.). These ideas would be meant to improve the relationship between actors, with the private sector partners also putting skin in the game (investing their own resources, not just relying on FTF Inova). Other ideas may be to

[9] USAID/Mozambique. (2015). Country Development Cooperation Strategy (CDCS) 2014–2019, p. 44-45. Retrieved from https://www.usaid.gov/sites/default/files/documents/1860/CDCS_February_2019_Mozambique.pdf.

introduce new actors into relationships dynamics (like a third-party human resources firm to understand and propose reward incentives based on surveys of farmers, or like a legal services organization for dispute prevention and resolution assistance between the parties). **Probing is always experimentation anchored to the agent level to affect their relationships and in turn the system-level dynamics**.

While probing occurs at the agent level, **the *Why*** of probing is to see how the probe influences emergent behaviors within the network of the agent(s) and the system as a whole. For example, the aforementioned probe is proposed in part because FTF Inova has researched and seeded ideas for change with potential partners that there may be ways to improve the dimensions of trust that are pain points for both SHFs and the buyers of their production (especially commodity exporters and domestic traders). During the market system baseline, neither the SHFs nor the buyers of their production expected much from the other in terms of reliability, competence, or integrity in their dealings. By probing, we explore the possibility for innovation and learning in a system where side-selling and weak or predatory relationships have typically prevailed. But since there is no agreement or certainty in advance about what will work, we probe in this iterative, adaptive manner.

FTF Inova therefore aims to gradually "unpack the black box" of complex market behaviors by testing and collecting evidence on business innovations *during* each intervention. This way, we can connect the innovations to the agents we partner with and their network, rather than conducting detailed analysis of the system dynamics and intervention planning *before* activities take place.

As FTF Inova probes and facilitates the emergence of new and improved relationships and behaviors by leveraging individual partnerships and probes, the MEL function of the project also tracks the emergence of new structures within the whole market system and within individual market functions. For example, the more that national distributors of agricultural inputs expand their outreach to new retail points and consolidate commercial relationships based on mutual trust and mutual investments in delivering higher value to SHFs, the more that the role of each player in input distribution becomes specialized, effective and efficient, and dependable. Detecting these emerging patterns is key for FTF Inova to address probes strategically and to become more effective at nudging the market towards a more inclusive equilibrium.

3. MEL Approach

3.1 Guiding Principles and Processes

Our M&E processes are set up to use data and information to support learning. Learning is particularly important given that it is uncertain and unpredictable how the Mozambican agricultural market systems will respond to our probes. Our approach to this challenge is inspired by the USAID Guidance on Complexity-Aware Monitoring,[10] which provides a framework for introducing market innovations into situations of uncertainty. As such, our MEL system is driven by four guiding principles:

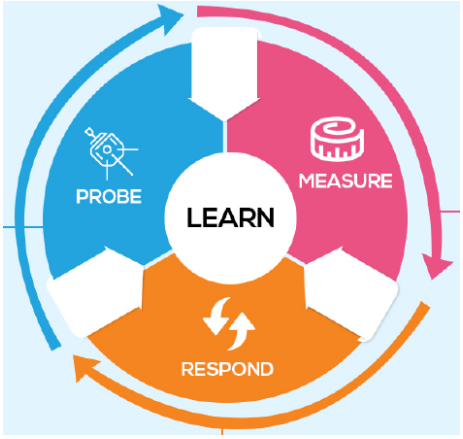
- **MEL is mainstreamed.** All members of the FTF Inova team are part of the MEL system of measuring results and will continuously develop and use effective means of measurement to learn, adjust quickly, and focus on activities that drive positive changes in the market system. Developing staff skills in MEL is a top priority, and FTF Inova leadership continually invests in the capacity of staff to innovate and improve MEL practices.
- **Evidence is a market function.** MEL should focus not only on FTF Inova's performance, but also on helping businesses to innovate successfully, expand their smallholder customer or supplier base, and involve women and youth effectively. This way, MEL can become an intervention in itself—supporting evidence-based decision-making that nudges partners towards a pathway of self-improvement, while also providing a basis for the development of data-driven services in the market system.
- FTF Inova's MEL emphasizes **learning based on real-world action.** It is characterized by adaptive partnerships and fast-cycle testing, using lean and rapid methods to gather evidence and use it for decision-making. By looking at where market actors show real appetite for change, FTF Inova can learn more quickly about ***traction*** for introducing innovations.[11] As such, rather than forcefully targeting interventions to solve weaknesses in the value chain as identified by analysis, the FTF Inova management processes are based on sense-making principles: attempting to make sense of an ambiguous situation in the agricultural market system based on empirical learning.
- FTF Inova's MEL is **gender-aware.** Participation, results, and potential sustainability of both agent- and system-level changes are evaluated with sex-disaggregated indicators at a minimum. Where probes have gender-sensitive or -targeted objectives of gender equality or female empowerment, custom indicators will be developed. Awareness and consideration of gender dynamics in FTF Inova's measurement approach will ensure that the Activity adheres to a "Do No Harm" principle where gender is concerned.
- FTF Inova's **measurement takes place by both *induction* and *deduction*.** Inductive measurement derives general principles from specific observations—in other words, FTF Inova collects empirical data and assembles evidence to make possible conclusions about change. Data collected using the agent-level measurement tools listed below allow for measurement by induction. Deductive measurement, in contrast, works backwards from observed outcomes to arrive at more definitive conclusions about the change process. The suite of system-level tools below allows for deductive measurement.

[10] USAID Office of Learning, Evaluation and Research. (2018). Complexity-Aware Monitoring Discussion Note (Brief). Retrieved from https://usaidlearninglab.org/library/complexity-aware-monitoring-discussion-note-brief.

[11] "Traction" refers to the support or interest that is needed for something to make progress or succeed.

MEL is at the core of FTF Inova's **adaptive management approach** (see the FY 2019 Annual Work Plan). Without measurement and intentional learning, probing and responding would be based on personal judgment and experience rather than evidence, which runs the risk bias—like *confirmation bias* (unconsciously ignoring evidence against your reasoning), *saliency bias* (failing to account for less striking or perceptible aspects of a process or problem), or the *halo effect* (attributing successes and failures of businesses to the personality of their leaders)—that can lead to poor business decisions.

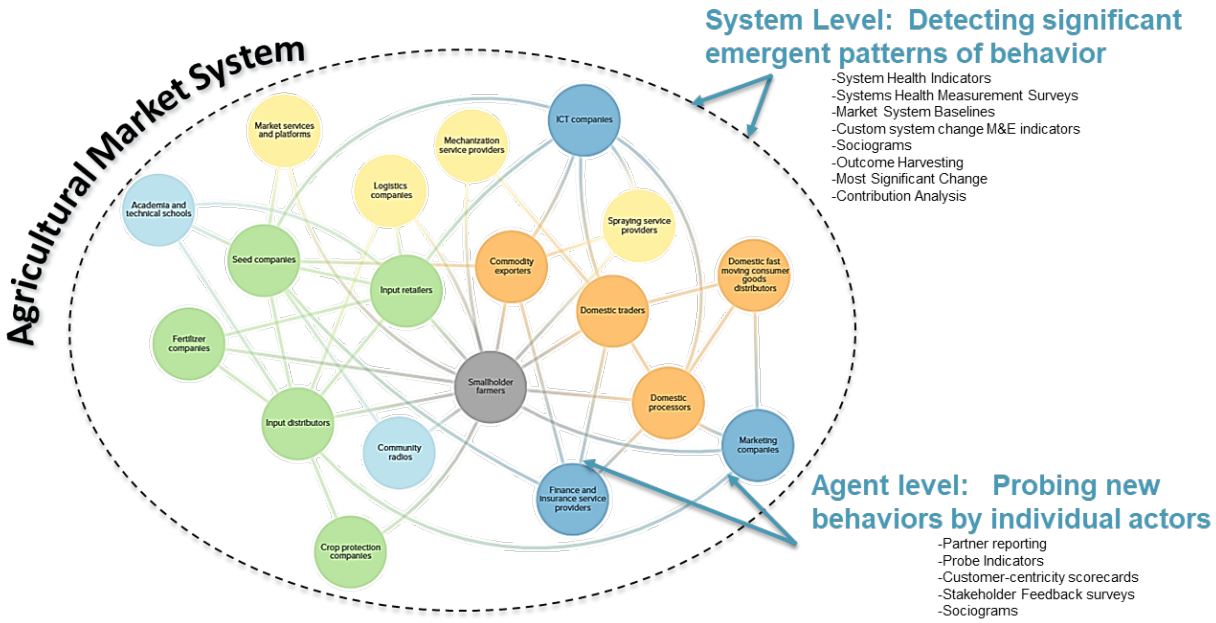
Figure 5. FTF Inova's Adaptive Management Approach



MEL greatly improves our capacity to be flexible, to respond to opportunities as they emerge, to probe, to amplify successes, and to rapidly abandon failures as part of collaborating, learning, and adapting (CLA) based on evidence. MEL processes and roles are designed to support the FTF Inova team in defining probes and updating, adding to, or dropping them on a quarterly basis using data/information collected at the agent level as well as the system level.

MEL is inherently about the measurement of results, particularly those linked to interventions and iterations. Even when the potential outcomes of interventions are uncertain, it is helpful to have a basis for knowing when to measure, what kinds of changes may be relevant, and how to assess changes. Figure 6 summarizes how and at what levels FTF Inova measures changes.

Figure 6: Entry Points for MEL on FTF Inova



The following sub-sections present the two levels of analysis that we consider. First, we present the **agent-level** changes we can more easily track and connect to FTF Inova partners and specific interventions. Thereafter, we present how we capture and evaluate wider market **system-level** changes.

3.2 Agent-level measurement

A key challenge for FTF Inova is to know which innovations are working and which are not. This, however, is not a straightforward task. An innovation can be assessed from different points of view: that of the partner, that of the target group farmers, and that of the wider market system. The task for FTF Inova is to balance these competing points of view to make executive decisions—based on evidence, but rapidly enough to maximize available resources—about which partnerships to end, which to scale up, and what new areas to probe. It may be, for example, that an innovation (such as a new last-mile distribution system) succeeds in expanding the customer base for a distributor and increases the speed of delivery to farmers, but that it requires a high capital outlay to set up—meaning the barriers to entry for other firms to "copy" the model are too high. Or it could be that an innovation in customer-centric product design is leading to enthusiastic reviews from farmers but the return on investment for the company will only occur over extremely long time horizons.

FTF Inova uses an adaptive approach to intervention and portfolio management. FTF Inova's **probe-measure-respond** cycle emphasizes probing and learning. The building blocks of the adaptive management framework are as follows:

1. **Probing** is the act of testing catalytic innovations[12] in the market system. Probes are based on the experience and knowledge acquired by FTF Inova and its partners. They are defined in function by the vision and the interests expressed by the partner. Each probe is both a catalytic innovation or change as well as an opportunity for learning.
2. **Measuring** is the act of systematically using tools to find, collect, analyze, and interpret the dimensions, capacity, or amount of something. It contributes to identifying successful probes to be amplified and improves the innovations FTF Inova helps partners to adopt and assess to detect outcomes and gauge impact.
3. **Responding** is the moment in which FTF Inova verifies whether a probe is successful at nudging market actors along a pathway of change towards more inclusive markets or whether it needs to pivot its strategy. Responses are defined during FTF Inova's **quarterly portfolio reviews (QPRs)**[13] and are also supported by the CLA process.

At the agent level, FTF Inova develops **intervention monitoring plans (IMPs)** to capture which behaviors or elements of innovation feasibility to test or data points to validate. IMPs are drafted during the partnership negotiation and design stage, alongside the Deal Note[14]. IMPs function as an internal indicator tracker. Each IMP is an Excel file tab that includes indicators. For each indicator in the IMP, FTF Inova staff detail descriptions of data collection and analysis methods, baseline values, current values, and current results. Portfolio managers are responsible for developing IMPs, with participation and advice from the MEL team. This responsibility falls on portfolio managers since data should be useful and inform decisions, and as portfolio managers manage the partnership with the business and provide technical guidance for business decisions, they are best suited to define probes and what data would motivate the business and FTF Inova to invest resources or modify the business model. The role of MEL plan is, however, crucial to ensure that the probes selected take into account the learnings that FTF Inova has developed thus far, and that they contribute to significant market system changes. The MEL team also helps portfolio managers to select measurement tools that can provide the required evidence in a fast and cost-effective way.

[12] Innovations are considered to be "catalytic" when they are a departure from current prevailing business practices, and when they are easily replicable, or scalable, or when they generate learning that can be used by market actors to further adapt their business to deliver more inclusive and higher-value outcomes to smallholder farmers.

[13] The QPR, as described in section 5 of this MEL Plan, is a two-day event facilitated by the M&E Manager and the Chief of Party (COP) to reflect on, adjust, and add to probe learning through FTF Inova partnerships.

[14] Deal Notes are agreements between the partner and FTF Inova that detail the specific implementation of an activity or set of activities.

3.2.1 Agent-Level Measurement Tools

MEL plays a central role as the "data engine" powering adaptive management. All interventions must have an IMP that incorporates required performance indicators for partner reporting and probe indicators to measure the innovations resulting from the co-creation process. The MEL tools listed under "partner reporting" and "probe indicators" are key part of the IMP, and are designed to capture key changes in terms of partner performance and position within the market system. These tools help *both* FTF Inova and partners navigate the uncertain pathways towards success, by shifting data gathering from a transactional, top-down mindset to a transformative, bottom-up one that aligns the MEL function with a facilitation approach. The three additional tools presented (stakeholder feedback surveys, customer-centricity scorecard and sociograms) are optional tools, that are tailored to measure specific results in terms of customer centricity, receptiveness to the needs of farmers, and informational flows. These tools are used only when interventions specifically target these areas, and partners are actively interested in measuring performance.

Table 1. Agent-Level Measurement Tools used in an IMP

Type of measurement	Measurement tools
Agent-level (bottom up)	Partner reporting Probe indicators Stakeholder feedback surveys (optional) Customer-centricity scorecard (optional) Sociograms (optional)

Partner reporting

Performance indicators are outlined in **Deal Notes**. These are designed to capture "what happened" in individual partnerships as a result of FTF Inova-supported innovations—usually in terms of changes in sales or customer reach as well as in behavior (knowledge, practices, and attitudes). A number of these lagging indicators are then aggregated in order to report on the Global Food Security Strategy indicators.

- ***Lag indicators*** measure things that have already happened. These measure the success of the innovation—the "ends."
- ***Lead indicators*** are predictive of the success of future innovations, such as the efficacy of new processes or satisfaction with services. They measure the journey towards innovation—the "means."

Where possible, FTF Inova portfolio managers and MEL staff work to incentivize partners to collect data, especially those in line with **key performance indicators (KPIs)** that demonstrate how effectively the business is achieving its objectives. KPIs can be set at multiple levels to track processes like sales, marketing, HR, client relationships, etc., or the overall performance of the business. Businesses tend to use KPIs to make decisions and define success for themselves, not donors. The challenge for FTF Inova is to convince partners of the utility of collecting data at regular intervals and with enough disaggregation to analyze how inclusive they have been of the farmers and firms or interest (by size, sex[15], age, location, etc.)

Partner firms are expected to collect data at sales points, like those of their franchisees, agro-dealers, and aggregators, and/or through customer relationship management (CRM) technologies and stakeholder feedback surveys. While FTF Inova offers guidance on data-collection methods for businesses and may offer incentives (like competitions for agro-dealers with the best record-keeping), ultimately, the intent is for partners to see value in collecting this information and finding the costs of doing so sustainable for their businesses.

[15] FTF Inova has explicitly been working to promote private sector partners to see the value of gendered data. See more at USAID's Agrilinks site: https://www.agrilinks.org/post/leveraging-gender-norms-and-private-sector-partnerships-increase-womens-use-agricultural-inputs

FTF Inova expects quarterly data to be provided by partners on important metrics relating to the performance of the intervention. This **quarterly report** includes the number of farmers that have been engaged by the partner and how much those farmers purchased or sold. Data reported by partners will be sex-disaggregated where a person or institution that is owned or managed by a person is the unit of measurement or analysis. On a less frequent basis, typically annually, FTF Inova collects information on other key data (e.g., partner profitability). FTF Inova will support its partners to collect and process this data as needed based on partner capacity.

The section on partner reporting is at the base of the IMP for each partner and appears as follows, including the 13 indicators tracked at the agent level (found in Annex I):

This section content should be completed by the MEL staff with input from Portfolio staff and Partners						
#	**Performance Indicator**	**Frequency**	**Data source**	**Baseline**	**Current value**	**Target**
EG.3.2-26	Value of sales of firm	Monthly	Partners records	Example: $5,800,000 *Need to baseline, cannot be zero	Example: $5,850,000	Example $6,380,0000

Probe indicators

FTF Inova is working with uncertainty, meaning that it will not always be clear in advance how different types of innovations will impact the market system. Data is therefore required in order to make decisions about "what's working", not only "what happened." Given the complexity of the situation, FTF Inova needs to rely on evidence—not intuition or anecdote—to make pivot or preserve decisions.

Over-reliance on "gut instinct" is the way business is done in Mozambique, but it will not be how FTF Inova draws conclusions with its partners.

To aid operational decision-making, FTF Inova measures each innovation against three dimensions:

1. **Sustainability**—will the innovation be adopted, internalized, and owned by market actors?
2. **Value**—will the innovation deliver value to farmers?
3. **Scale**—will the innovation spread and shift aggregate behavior patterns in the market?

The section on probe monitoring is a primary part of the IMP for each partner and appears as follows:

These columns should be completed by the Portfolio Manager		*These columns should be completed with the Portfolio Manager, MEL staff, and partner*			
Dimensions	**Hypothesis**	**Indicator**	**Method / Data source / Sample**	**Frequency of collection**	**Timeframe for testing**
Sustainability	Best farmer rewards in performance clubs prevent diversion of inputs/supply	1.1 Margin per supplier	Reports of the company	Every season	2 seasons
Value	Visible rewards and performance clubs work well to incentivize SHF	2.1 Farmers' satisfaction score	Surveys (SMS and Computer-assisted telephone interviewing[16]) . Level of satisfaction with rewards, access to market, price and delivery process.	Every 3 months	9 months

[16] Computer-assisted telephone interviewing refers to when a software application guides the script that an interviewer follows.

Scale	Performance clubs build trust and loyalty	3.1 Buyers' clubs replicated by other companies	FTF Inova reports	Every 6 months	2 seasons

Portfolio Managers are the interface of probing and working with the market actor partners; they need to be focused not just on delivering an innovation, but on deciding whether or not it is working *during* implementation. Probe indicators are therefore "owned" by the respective Portfolio Managers. They need to decide which metrics to use to assess progress, setting the baseline, coordinating data collection, and interpreting data. The MEL team provide support on data-collection methods (and can even collect data personally when necessary) and advice on the technical aspects of indicator selection and construction and on the robustness and rigor of data. If the probe is specifically designed to be gender-sensitive or gender-targeted, the WEE specialist will also provide support on indicators and data collection methods. During each QPR, Portfolio Managers are tasked with reporting on the status of the probes and any associated learning based on the indicators and data.

Probe measurement follows a simple three-step process.

- **Step 1:** Portfolio Managers pick no more than 4 to 5 indicators for each probe to measure sustainability, scale, and value, drawing inspiration from the menu provided below and in consultation with the partner. Portfolio Managers are free to choose their own "off-menu" indicators but must consult with the MEL team before doing so. The selected indicators are included in the IMP.
- **Step 2:** Insert a baseline measure into the IMP for each selected indicator. When partners cannot already provide a baseline, the Portfolio Managers must consult the MEL team and plan for baseline data collection.
- **Step 3:** Measure the indicators over time, using any of the methods in Figure 8, below. The frequency of measurement can be very short or very long, depending on the nature of the innovation. An example of monitoring over time could look like the following example:

Figure 7. Example of Probe Monitoring[17]

Firm	**Seed Company**			
Deal Note objective	Seed company will gain direct experience of marketing tactics that are tailored to SHF, and will measure how these can trigger demand for inputs and increase the number of SHF buying seeds; SHF will gain increased value from adopting agricultural inputs using a Customer Relationship Management system.			
Desired sector's systemic change(s)	**Input Distribution Network System** - **Evidence-based management to understand & serve customers better to drive loyalty**			
Deal note probe(s)	Customer tracking and targeted marketing and services drive up demand with SHF			
Dimension	**Sustainability (partner)**	**Value (SHF)**	**Scale (market system)**	
	Increased sales outweigh costs of investing in customers' analytics	Service and value proposition to SHF improves	Copying by other distributors. Marketing experts to serve more clients.	
Probe Indicators		**Week 1**	**Week 2**	**Week 3**
Indicator 1	# of ways customers heard about improved seeds (# of customers reporting each way—neighbors, agrodealer, radio, SMS, online, etc)	• 85% 1 way • 10% 2 ways • 5% 3 ways	• 75% 1 way • 17% 2 ways • 8% 3 ways	• 62% 1 way • 30% 2 ways • 8% 3 ways
Indicator 2	# of reasons customers bought improved seeds (# of customers reporting each reason)	2 reasons	3 reasons	3 reasons
Indicator 3	% of customers likely to recommend (and % likelihood)	50%	50%	30%

The two tables below provide the menu of indicators used to test the hypothesis for each probe dimension (Table 2) and the set of instruments that FTF Inova may use to measure probe indicators (Table 3).

[17] This example includes select illustrative content; it is not meant to be a comprehensive example of all indicators, methods or fields.

Table 2. Probe Indicator Menu

Dimension	Indicators	Notes
Sustainability	Change in cost-sharing ratio	Measures the level of partner investment in the innovation—and how it changes over time. This provides a better indicator than simply the number of partners co-investing.
	Margin per customer	This given an indicator of likely profitability of the innovation, compared to other company uses of their time/capital. It is a better indicator than simply "change in number of customers"
	Market share	The overall size of the market may be difficult to estimate
	Revenue per unit sold	Revenue per unit sold can also be compared to fixed and variable costs
	Supplier retention/referral rates	Excessive churn can affect companies' incentives to continue with supply chain innovations, especially for out-grower schemes.
	Redundancy rate	Innovations can be brittle and not resilient if their functioning only relies on a small number of actors. This indicator captures the number of actors fulfilling the same market function—which can be used to identify critical nodes where business failure would impact the functioning of the entire system. While precise numbers may be difficult to obtain, FTF Inova can make an assessment whether there are extremely limited (just one or two), very limited (less than 10), limited (less than 30), numerous (more than 30), very numerous (more than 100) companies engaged at each value chain stage: Raw materials / sourcing Collection and aggregation Primary and secondary processing Retail and distribution Export schemes
Scale	Replication rate	Counting the new of competing/similar firms copying the innovation is a long-standing market systems indicator
	Change in hiring patterns	This qualitative indicator is an indicator of whether systems are becoming more connected and networked. It uses a rating scale to measure system connectivity in meeting labor demand, based on whether employers look outside of their immediate known environment to fill vacancies. Using their existing market knowledge, projects should make an assessment on a 1-5 scale: 1) Vacancies filled mainly by referrals from other workers or business owners 2) Vacancies filled mainly by word of mouth within communities 3) Vacancies filled by intermediaries (labor brokers) 4) Vacancies filled mainly by publicizing (flyer, newspaper) 5) Vacancies filled by professional services (headhunting, recruitment firms)
	Perceived level of barriers to entering trusted relationships	This indicator is based on a series of responses to binary yes/no questions and is designed to capture both stated preferences and revealed actions of market players in forming long-term commercial relationships. Ask a sample of market players: In the last 6 months, I have transacted with businesses outside of my ethic group (Y/N) In the last 6 months, I have transacted with businesses outside of my religious group (Y/N) In the last 6 months, I have transacted with businesses outside of community/village (Y/N) I find it more difficult to build trusted relationships outside of my ethnic group (Y/N) I find it more difficult to build trusted relationships outside of my religious group (Y/N) I find it more difficult to build trusted relationships outside of my community(Y/N) This can be turned into an index by assigning values to yes (1) and no (0) and averaging responses, which can be tracked over time. To ensure data is comparable and there is no sampling bias, this should be administered via panel (same respondents in repeated surveys).
Value*	Acquisition measures	How do customers find the product/service? (e.g. number of attendees at demo plot, number of shop visits, cost per acquisition)
	Activation measures	Do customers have a great experience? (e.g. number of first-time orders, conversion rate)
	Retention measures	Do customers come back? (e.g. number of monthly repeat orders, customer churn)
	Referral measures	NPS is a standard measure of consumer satisfaction. It only works for EXISTING customers of a business, not potential new ones.
	Revenue measures	Do customer bring marginal revenue increases? (e.g. customer lifetime value, break-even points)

* These "value" metrics are commonly known as "Pirate" (AARRR) metrics. The idea is to convert as many customers from interest in a product/service (acquisition) to revenue generation. The key metric is the *conversion rate*–1,000 people may express interest in being part of an out-grower scheme, but only 500 sign up (50% conversion) and just 100 sell for more than one season (10%) and just 10 tell other friends and family about the scheme (1%).

Table 3: FTF Inova Data Collection Methods for Probe Indicators

Method	Instrument	Description
Quantitative	Surveys	Standardized sets of predetermined, mostly close-ended questions. These can include questions on sales, exports, and costs as well as questions on attitudes, plans, and experience. Examples of two types of survey.
	Observation checklists	Simple lists of criteria that can be marked as true or false. Checklists can also be used to count or time events or instances.
	Tests	Standardized sets of questions used to assess knowledge and understanding, particularly after training. Scores are then applied based on responses.
	Questionnaires	Set of questions based on the performance indicators presented in the form of tables and closed questions, which will facilitate monitoring of the results achieved by the partner based on FTF Inova assistance.
Qualitative	Key informant interviews (KIIs)	A series of open-ended questions conducted in a semi-structured format with individuals who are selected for their knowledge and/or experience on a particular issue.
	Focus group discussions (FGDs)	Facilitated discussions among 8 to 12 selected participants with similar backgrounds. Like KIIs, FGDs are conducted in a semi-structured format based on a series of open-ended, guiding questions.
	Stakeholder meetings	Facilitated discussions with selected FTF Inova stakeholders. Unlike FGDs, participants can be anyone who is involved with FTF Inova and do not necessarily need to have similar backgrounds.
	Case studies	Narrative constructions of a single person or group in a particular context that FTF Inova hopes to investigate and illuminate through interviews, observations, and secondary sources.
	Direct observation	Involves spending a prolonged amount of time to observe naturally occurring phenomena, which are then recorded in field notes.

Stakeholder feedback surveys

Stakeholder feedback surveys refer to specific instruments, using survey methods, that aim to help FTF Inova and its partners listen directly to customers, suppliers, and employees not as passive "end-beneficiaries," but as active economic and social agents. By so doing, FTF Inova aims to build the capacity of companies to be more responsive to smallholder wants and needs.

FTF Inova uses three types of feedback surveys, which can be found in Annex IV:

- **The "Value Proposition" survey,** which investigates the reasons for purchasing, the perceived value for money, and product quality perceptions;
- **The "Customer Satisfaction" survey,** which assesses how likely customers are to recommend a product or service, suggestions for improvement, and customer experiences and satisfaction; and
- **The "Profile Check"** which discovers who is being reached using simple proxies such as the Poverty Probability Index (PPI).

FTF Inova will use stakeholder feedback surveys to produce actionable insights for FTF Inova partners piloting innovations. Such surveys will be used and included in the IMP only when the partner explicitly expresses interest in using the data for business model decisions. FTF Inova staff may at times carry out some surveys in house or fund data collection through mobile data platforms for the sake of demonstration, with the intent of nudging market actors to invest in evidence based decision making.

Customer-centricity scorecard

While stakeholder feedback gathers data, customer centricity describes the processes and people skills that the private sector must have in place to use data effectively. That is, it describes how embedded a customer focus is within company decision-making structures. This is essential for companies to develop a culture of market segmentation and responsiveness to SHF needs. As such, the partner customer-centricity scorecard aims to

help partners self-assess their own decision-making process and help FTF Inova decide when to build the capacity of partners to gather evidence and use it for decision-making.

The tool itself uses a questionnaire method, found in Annex IV, comprising two parts:

- **Part one - Reported fact**—completed by company management to reflect on and discuss which customer-centric attributes are appropriate and priority to develop; and
- **Part two - Reported perception**—anonymous responses provided by employees that show how well customer centricity is being deployed in practice.

FTF Inova will include the customer centricity scorecard in the IMP only for those partner firms who expresses commitment to adopt innovations that prioritize customer needs and aim to improve customers' experience as a strategy to drive up demand. As part of the baseline, the FTF Inova MEL staff may run only part one, part two or both part of the scorecard as practicable.

Sociograms

Another way of gaining insights into agents in a market system is to map the sources of market information (like prices, grades, standards, new opportunities, and ways to improve business performance), suppliers, and buyers of goods and services for FTF Inova partners). These influencers and stakeholders are captured primarily through other tools that FTF Inova uses, including but not limited to:

- Baseline and subsequent interviews with FTF Inova partner firms;
- Meeting notes with partner firms and stakeholders in SlimWiki; and
- The System Health Indicators on Relationships and Information Flows (see the next section).

FTF Inova will construct sociograms based on probes with specific FTF Inova partners, insofar as the flow of information or finance is considered as a behavior to probe for changes. For example, if a probe seeks to build a new alliance between firms to improve distributions at the last mile, FTF Inova may use a sociogram to show which firms share information about their customers' purchase volumes and frequencies to coordinate logistics and how this affects the quantity of farmers they interact with.

FTF Inova also has two custom indicators related to agent-level measurement, which can benefit from the visual charting that sociograms provide. These are:

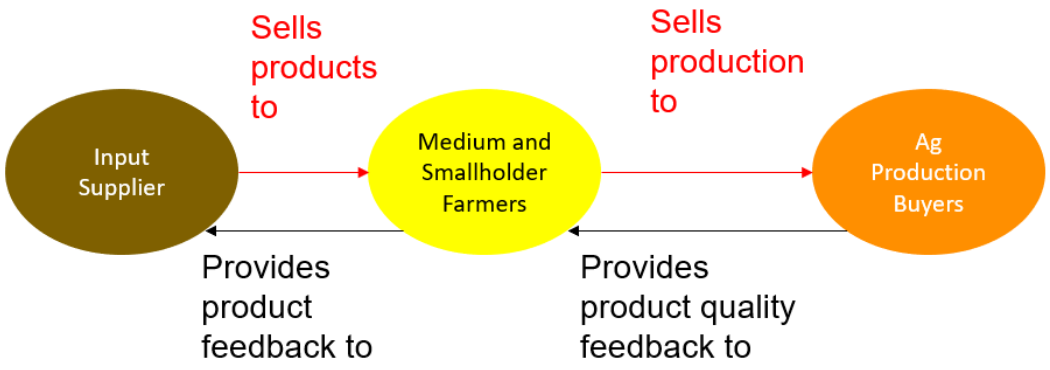
- Number of farmers who have a new/improved commercial relationship with partner firms; and
- Number of FTF Inova partner firms who have new/improved commercial relationship with other firms.

Sociograms can help reveal the business connections of one FTF Inova partner over the course of a pilot (using an egocentric sociogram[18] over time). By mapping the way two or more agents (individuals or organizations) are connected and the way in which they regard and behave towards each other, we can monitor dimensions of interest in their relationship.[19] Below is a simplified sociogram.

[18] An egocentric sociogram focuses on a network related to a focal node ("ego") and the nodes directly connected to them (called "alters").

[19] USAID Bureau for Policy Planning and Learning. (2016) The 5Rs Framework in the Program Cycle Retrieved from https://usaidlearninglab.org/library/5rs-framework-program-cycle cites the following dimensions of interest: formal to informal, strong to weak, mutual to one-sided, cooperative to adversarial and productive to destructive.

Figure 8. Simplified Sociogram



WARNING: DO NOT STOP READING THIS PLAN HERE

While fast-cycle testing is key to helping FTF Inova and its partners make business decisions based on evidence to maximize the competitiveness of the firms, provide value to farmers, and catalyze systemic changes, **systemic change is not captured by fast-moving variables.**

If you do not read the next sub-section of this MEL plan on systems level change, it is highly likely that you will have a false read of data and misinterpret short-term changes at the agent level as systemic change.

We probe and measure at the agent level to help us make specific observations and draw possible conclusions about the changes—this is why the probe indicators at the agent level are helpful for us. We use the probe indicators to determine what is happening, the partner reporting to assess what happened, and the systemic measurement tools (discussed in the next subsection) to assess replication and disruption throughout the system and the extent to which the agent influenced or contributed to such change.

3.3 System-Level Measurement

From an early stage, FTF Inova looks for signals of systemic change via its MEL system. The aim is to track whether systems are evolving in ways which support more inclusive behaviors—in business strategies, and patterns of competition and cooperation—or more extractive behaviors.

We understand and benchmark market systems change based on the following logic[20]:

- The current state of a system—and what it will likely be in the future—is defined by a range of interactions of agents that are constantly in motion;
- These interactions settle into emergent patterns and relationships[21] that create stability in the direction the system is evolving;
- However, emergent behavior cannot be predicted by examination of a system's individual parts or agents; so

[20] This section is adapted from Market Systems Resilience: A Framework for Measurement (USAID) and USAID LEO Report No. 47 Disrupting System Dynamics: A Framework For Understanding Systemic Changes, October 2016.

[21] Emergence is "a phenomenon whereby well-formulated aggregate behavior arises from localized, individual behavior." See Miller and Page. Complex Adaptive Systems: An introduction to computational models of social life. Princeton University Press. 2007.

- Understanding the whole system is therefore critical, as agent-level change may not be the same as systemic change.

To understand how a market system evolves, it is also helpful to understand a few key concepts:

Path dependency is the process by which systems evolve. Path dependency means that a system's current patterns are a function of its past patterns. In short, how the market system arrived at its current state and its characteristics will have implications on how it may change going forward. **Practically speaking, this is why we need to conduct market system baselines.**

Even though market systems are always in motion, the baselines help us understand and map the networks of connections within a system that shape the roles agents assume and the norms influencing the patterns of their collective behavior with one another. These networks and norms are often the deep underlying causes of why the market system performs or functions as it does.

Once we know more about the market system, the basic task of MSD is to influence a given market system to evolve faster and in a way that allows benefits to accrue inclusively and durably to target groups of agents. For FTF Inova, the target groups of agents are farmers, particularly smallholders and marginalized segments of farmers, like females and youth. FTF Inova is interested in facilitating changes that make the market system more inclusive of target groups of farmers and make the market system more competitive in terms of how effectively the target groups of both farmers and firms interacting with farmers can adapt to sell their products to meet demand requirements (price, quality, quantity).

In order to facilitate the evolution of the system, we must understand how the agent level and the systems level (as a collective) interact and influence each other. Here the concept of ***feedback*** is key. Feedback refers to the response a system gives to a stimulus. For FTF Inova, the stimuli are the probes at the agent level, which we monitor to see how the system responds.

Systems practitioners define two types of feedback: (1) that which *reinforces* a certain behavior and (2) that which pushes back on a behavior to stop it or modify it (*balancing* feedback).

Whether feedback from the system supports or pushes back on a specific behavior (probed at the agent level) is driven by the systemic biases that drive a system to evolve in a certain direction. The challenge is that in thin markets, with few or limited supporting services, the operating dynamics are complex and whether a probe will foster change to the current state of the system—balancing feedback—is uncertain.

For example, a retailer may sell packets of adulterated seed, but with no competing retailers in the community, farmers may be forced to make repeat purchases (a signal to reinforce the retailer's extractive behaviors). But as farmers amplify their voice over time, they may start to push back.

To interpret different types of feedback within systemic change context, systems practitioners use the idea of ***fast- and slow-moving variables***:

- **Fast-moving variables** capture visible processes in the present. They often change rapidly and can be more easily measured at the agent level.
- **Slow-moving variables** (also known as control variables) capture the underlying rules, incentives and structure of the system. They are an emergent outcome of long-term processes and constrain the response of fast-moving variables.

Transactions, for example, are a fast-moving variable, as there are many exchanges that take place every day. To understand how feedback is happening and whether it is affecting positive shifts, we have to identify emergent patterns from transactions over time and at a higher level. More specifically, looking at a very small set of transactions during a specific point and time provides very little information related to whether change is real and durable. A slow-moving variable would be the collective demand for a whole product or service. This variable is slow-moving because the feedback cycles take more time and determine when there is a shift in feedback (e.g. to reinforce better customer service and experience)—which can be hard to perceive over a short period of time. An even slower moving variable is gender norms. For example, women may start buying

more inputs over a period of years, suggesting a change in the collective demand, but this may not provide real insights into whether gender norms have substantially changed. The change in collective demand would have to be investigated to understand the nature of change in attitudes and behaviors around the perception of women as farmers and consumers of inputs.

Tracking "agent-level" variables without an understanding of their relationship to slower-moving variables can create a false read as to whether systemic change has happened. If external agents such as a development aid project exert pressure on a system, fast-moving variables can become disconnected from slow-moving variables. Transaction volumes may go up, with more women farmers purchasing seed, but if underlying norms have not shifted, and—for example—agro-dealers' prejudices persist, then transaction volumes will eventually revert to lower levels. **Measuring systems change is essentially about tracking these slow-moving variables that dictate emergent patterns of behavior and, ultimately, relationships.**

FTF Inova measures change through a "bottom-up" and "top-down" approach. System-level changes are captured in terms of patterns of trust, cooperation, and competitiveness. Within partnerships, FTF Inova-supported behaviors and concrete results are captured. This aligns with good practice in measuring market systems change,[22] which calls for:

- **Situational awareness.** Looking for outliers that quickly begin exhibiting desired behaviors to give early feedback on whether initiatives are moving in the right direction.
- **Continuously linking the top-down and bottom-up.** Estimating the relative contribution and value of behaviors supported by FTF Inova at the micro level to overall market systems change.

3.3.1 Systems Level Measurement Tools

The challenge in systems measurement is that there is always movement and change in the system, but not all changes are significant or disruptive shifts. The first three tools presented in Table 4 below help us to narrow our focus to possible systemic changes, like changes in the flow of information, finance, investments, and how market actors in the system act and relate to each other, which may or may not be catalyzed by FTF Inova activities. The remaining tools help us evaluate the extent to which the systemic changes in networks and norms are related to FTF Inova interventions—we refer to these as systemic change assessments, as their purpose is more formative than summative in nature. FTF Inova also explicitly considers gender issues linked with systemic changes, especially if our probes had gender equality or female-empowerment objectives.

As the MSD community continues to innovate new ways to measure systemic change, FTF Inova aims both to contribute to the emerging knowledge base and to remain receptive to adopting new tools and approaches that can provide better insight into the direction of market systems change. The below tools may therefore be updated based on our experiences.

Table 4. System-Level Measurement Tools

Type of measurement	Measurement tools
System-level (top down)	Systems Health Measurement Survey Custom system change indicators Sociograms Outcome harvesting Most Significant Change Contribution analysis Farmer Market Study Mid-term and Final Performance Evaluations

[22] Cunningham and Jenal introduce the idea of top-down and bottom-up measurement and call for measurement in market systems in Rethinking Systemic Change: https://beamexchange.org/resources/861/.

Systems Health Measurement Survey

System Health Indicators are a quick measure of "system dynamics"—that is, how actors in the system act and relate to each other. The five System Health Indicators are:

- Churn (captures average change in suppliers and buyers over 3-6 months)
- Maintenance versus Growth (analyzes how much of a firm's revenue is spent on maintaining their regular operations versus any investment in building operational capacity)
- Delays (analyzes delays and changes in delays over time)
- Information Flows (analyzes whom firms and farmers get information from)
- Stresses and Concerns (analyzes emotional responses to business practices/relationships)

The indicators above are collected through the Systems Health Measurement Survey (see Annex IV), which is administered to FTF Inova partners and other market actors every 6-12 months, depending on the agricultural season. A change in a system health indicator does not indicate if the system is improving or worsening per se; instead, it just signals that something in the market system is changing. When health indicators suggest the system is changing, this triggers a Systemic Change Assessment (see below).

Custom Systems Change Indicators

FTF Inova collected baseline information from various actors in each of the five areas of the Agricultural Market System Wheel. The baseline information helps us to assess the health of the system (e.g., total industry exports, partner firm profitability, level of innovation, attitudes, and norms) and take a snapshot of current market system dynamics as a benchmark for assessing change over time.

We have also included **custom systems change indicators** that measure the orientation of the market system towards creating value for farmers, especially smallholders and females involved in the agricultural market system. The indicators, definitions, and methodical approaches were introduced in the Market Systems Baseline Study in May 2018.[23] FTF Inova's custom systems change indicators included in the baseline and detailed in indicator reference sheets in this plan are:

- Dimensions of cooperation and trust between smallholders and other market actors
- Average Business Model Innovation Index (BII)

Sociograms

While FTF Inova intends to use sociograms primarily for agent-level measurement to map the dynamics of specific probes of and the dynamics between FTF Inova partners and actors connected with them in the systems, sociograms can also help at the systems level to:

- Visualize all FTF Inova partners in a sub-system (like the input distribution network or the business services system), how connected they are, and which are hubs of information or finance;
- Reveal vulnerable or isolated market actors; and
- Detect where there may be more propensity towards collaboration between or within systems.

Using sociograms to monitor how individual agents in the system are connected and interact, especially at the collective network level, and how resources flow through the system, helps us understand both the nature of

[23] FTF Inova. (2018). Baseline Report. Retrieved from https://pdf.usaid.gov/pdf_docs/PA00T4M9.pdf.

their relationships and the results of the market system performance.[24] FTF Inova plans to use sociograms as a tool to detect relationships emerging among agents.

3.3.1.1 Systemic Change Assessments Triggered by System Health Indicators

Where the system health indicators signal a possible systemic change, FTF Inova will investigate the extent to which this is being catalyzed by FTF Inova probes. A three-step process will link new behaviors with systems change:

- **Step 1:** Compile the signs of systemic change collected via the above indicators and sociograms to prioritize the parts of the market system on which to focus.
- **Step 2:** Research the precise system change to attempt to make sense of the cause-and-effect relationships after the fact using one of the following assessment methods:
  - Outcome harvesting
  - Most Significant Change
  - Contribution analysis
- **Step 3:** Undertake and document results in a short (five-page maximum) "Systemic Change Assessment Report", a qualitative overview of the change that includes:
  - An assessment of the strength of change (weak, medium, strong)
  - An assessment of FTF Inova's contribution (low, medium, high)
  - An assessment of implications for female empowerment and gender equality (unintentional, intentional, or transformative)

Outcome Harvesting

Outcome harvesting is a technique that uses primary or secondary information to understand what positive and negative outcomes have occurred among targeted end-users or suppliers, and then explores attribution of that change. FTF Inova will use outcome harvesting in relation with specific probes that are gaining traction.

Most Significant Change

This qualitative, participatory approach asks market actors to share stories of the most significant change they have experienced as a result of interventions or other events. These changes are discussed at length with the group. FTF Inova will use most significant change in relation with specific probes, but also to detect significant changes in the market system to which FTF Inova may not have contributed.

Contribution Analysis

This stepwise approach helps to understand causality by testing assumptions in a causal chain, first using existing information and then collecting information to fill in the gaps. This is a practical way to infer causality and reduce the uncertainty about whether the intervention is making a difference to observed results. Contribution analysis helps to develop an *ex post* theory of change by constructing a "contribution story" that assembles various types of available evidence and noting the roles played by other actors (e.g. other donors and development programs) and factors (such as weather or changes in the economy). FTF Inova will use contribution analysis to analyze connections between system level changes and specific probes.

[24] FTF Inova can visually detect much of the changes using the sociogram diagrams or by analyzing the social network using mathematically generated centrality measures of degree or closeness.

3.3.1.2 Scheduled Assessments

Additionally, FTF Inova will use scheduled assessments, including the Farmer Market Study, Mid-Term Performance Evaluation, Non-Indicator-Based Systemic Change Study, and Final Performance Evaluation.

Farmer Market Study

This annual survey is used to capture data on farmer practices and technologies that FTF Inova may be promoting, or potentially promoting, and how changes in practices, technologies, yields, sales, and financing may be connected to the FTF Inova partners' innovations piloted in the market catchment area. Those farmers in the catchment area that did not use improved practices/technologies and/or did not purchase or sell to FTF Inova partner firms may serve as comparison groups and potential market intelligence for FTF Inova partners, and/or may also serve as examples of the impacts on farmers who have imitated FTF Inova-supported innovations while not engaging directly with an FTF Inova partner (i.e., secondary contacts). FTF Inova is incorporating female empowerment questions adapted from the Abbreviated Women's Empowerment in Agriculture Index (A-WEAI) into this study as well.

Mid-Term Performance Evaluation

The mid-term performance evaluation, to be completed in the first quarter of FY 2020, will assess FTF Inova's progress and achievements to date for the purposes of learning and accountability. Given the flexibility provided in ADS 201.3.5 for a mid-term evaluation to be "conducted or commissioned by an implementing partner—or consortium of implementing partner and evaluator—concerning their own activity (an implementer internal evaluation)," the mid-term evaluation will be conducted by a team of staff not directly involved in project implementation but familiar with the technical area, assembled from each organization in DAI's consortium implementing FTF Inova, with an external team leader. Other food security USAID-funded Activities have found that evaluation teams that include staff from implementing partner organizations may increase the probability of recommendations that can be feasibly implemented. Knowledge generated from the mid-term evaluation will help to align FTF Inova's interventions to capitalize on opportunities for greater impact.

Since activities begin on a rolling basis, FTF Inova will have to determine which activities to include in the mid-term performance evaluation based on how long they have been underway. Nevertheless, findings from the mid-term will also inform those later interventions that are not directly assessed.

Final Performance Evaluation

USAID will lead a final evaluation to assess the degree of FTF Inova's success in achieving targeted results, particularly in terms of its objectives and impact.

4. Managing the MEL System

All members of the FTF Inova team are part of the MEL team. The core MEL staff are designated within one of two teams, the MEL Management Team (comprised of in-country, full-time MEL staff) and the MEL Advisory Team (comprised of international staff providing MEL technical assistance). MEL roles are described in detail below:

- **MEL Management Team.** Under the direction of the M&E Manager, the FTF Inova MEL Management Team is ultimately responsible for implementing the MEL system; managing timely, accurate, and high-quality data; and reporting attributable results. The MEL Management Team is a key contributor to the MEL Plan and owns the document and the tools and processes it establishes. Although all FTF Inova team members have a MEL role, the MEL Management Team provides quality assurance of the system. Probes and IMPs ultimately sit with the MEL Management Team, though their development and iteration are collaborative efforts. The MEL Management Team is the primary point of contact between FTF Inova and USAID's MEL team and with the USAID Mozambique Monitoring and Evaluation Mechanism Services (MEMMS) staff who review data submitted to the USAID Mission via DevResults. The MEL Management Team also serves as the primary liaison for the FTF Inova MEL Advisory Team.
- **MEL Advisory Team.** This team reports directly to the MEL Management Team and is comprised of international experts providing ongoing and ad hoc technical assistance for the success of the MEL system. The team is led by the Senior MEL Innovation Advisor, the MEL Innovation Advisor, the Systems Change Specialist and the WEE Specialist. The team leads on the development of systemic change indicators and other strategies for measuring and demonstrating systems change. At the start of FTF Inova, The MEL Advisory Team played a lead role in developing and rolling out the MEL system, including development of the CLA Plan, MEL Plan, facilitating the design of probes, selecting key indicators of change, operationalizing IMPs, and designing baseline methodologies. The team plays an ongoing technical advisory and mentorship role on MEL.
- **Portfolio Management Team.** Portfolio managers lead FTF Inova's implementation and are at the forefront of learning. These core FTF Inova staff lead on much of the data collection for MEL and play a key advisory role on probes and indicator selection. For interventions, these FTF Inova staff design, own, and iterate the probing with partners, including collecting and recording observations and data for indicators, with advice from the FTF Inova MEL Management Team. Indications that market actors are buying-in and imitating changes in the market because of FTF Inova interventions will likely first be recognized by the Portfolio Management Team. In addition, the overall qualitative understanding of market dynamics is a key responsibility of the team.

The roles and responsibilities surrounding the three core MEL functions—data planning; data collection and analysis; and reviewing, reporting, and learning—are detailed in the tables below.

Table 5: Roles and Responsibilities in Data Planning

MEL Role/Task	Level	Timeframe	Lead	Participate	Review
Design framework for MEL system and develop MEL Plan	Program-wide	Annually	MEL Advisory Team	MEL Management Team, Portfolio Management Team	FTF Inova Management, USAID
Formulate probes	Agent-level	Before implementation, with review and possible revision throughout	Portfolio Management Team	MEL Advisory Team, MEL Management Team	FTF Inova Management

MEL Role/Task	Level	Timeframe	Lead	Participate	Review
Develop IMPs (including probe indicators)	Agent-level	Before implementation, with review and possible revision throughout	Portfolio Management Team	MEL Management Team	FTF Inova Management
Tailor and deploy tools for probe and performance data collection	Agent-level	Before implementation, with review and possible revision throughout	Portfolio Management Team	MEL Advisory Team, MEL Management Team	Portfolio Management Team, Procurement/ Operations Teams
Integrate WEE into probing and measurement	Agent-level	Ongoing	MEL Advisory Team	MEL Management Team, Portfolio Management Team	FTF Inova Management

Table 6: Roles and Responsibilities in Data Collection and Analysis

MEL Role/Task	Level	Timeframe	Lead	Participate	Review
Market Systems baselines	System-level	Before implementation	MEL Advisory Team	MEL Management Team, Baseline Consultant	FTF Inova Management, USAID
Develop probe baseline	Agent-level	After initial sector baseline completed	Portfolio Management Team	MEL Management Team, Portfolio Management Team, MEL Advisory Team	FTF Inova Management
Conduct systemic change studies (non-indicator based)	System-level	As needed, midline and final	MEL Advisory Team	MEL Management Team	FTF Inova Management, Portfolio Management Team
Ongoing data collection and monitoring progress	Agent-level	As per MEL Plan	Portfolio Management Team	MEL Management Team	MEL Advisory Team
Regular data analysis	Agent-level	As per MEL Plan	MEL Management Team	Portfolio Management Team	MEL Advisory Team (as appropriate)
DQA	Agent- and system-level	Annually	MEL Advisory Team, MEL Manager	MEL Management Team	FTF Inova Management, Portfolio Management Team

Table 7: Roles and Responsibilities in Reviewing, Reporting, and Learning

MEL Role/Task	Level	Timeframe	Lead	Participate	Review
Reflection workshops to review Activity and probe data	Program-wide	Biannually	MEL Management Team	Portfolio Management Team	MEL Advisory Team, FTF Inova Management
Reflection on probes and IMPs	Agent-level	Ongoing	Portfolio Management Team	MEL Management Team	FTF Inova Management, MEL Advisory Team

MEL Role/Task	Level	Timeframe	Lead	Participate	Review
Reporting results	Program-wide	Quarterly	MEL Management Team	Portfolio Management Team	FTF Inova Management, MEL Advisory Team (annually)
Design of additional follow-up studies	Agent- and system-level	As needed; at least annually	MEL Advisory Team, MEL Management Team, external consultants	Portfolio Management Team	FTF Inova Management
Evaluations	Program-wide	Mid-term and Final	External consultant	Consortia of partners (non-implementers)	FTF Inova (all staff)
Set learning agenda and undertake in-depth studies	System-level	Annual	MEL Management Team	MEL Advisory Team, Portfolio Management Team, FTF Inova Management	MEL Advisory Team, FTF Inova Management

5. Using and Sharing Results

5.1 Internally

The FTF Inova team uses data collected through the MEL system is to review performance and make adjustments at different levels:

- **Agent level.** Improved partner selection criteria, better focused deals, improved facilitation.
- **Market system level.** Updated strategies, decisions about whether to amplify or dampen signs of systems change via new/adjusted probes.

During FTF Inova **monthly meetings**, progress tracked by the MEL system is presented and discussed.

QPRs are held in the second week following each quarter with all FTF Inova technical staff as well as selected operations staff, especially those involved in partner engagement, finance, and procurement. The QPR is a two-day event facilitated by the M&E Manager and the COP, and it offers the opportunity to reflect on, adjust, and add to probe learning through FTF Inova partnerships.

Annual Portfolio Reviews are held at the same time as **Annual Work Planning** at the end of each FY. These stop-and-pause events allow the whole team to take stock of progress by gathering learning from the past year and planning future probes in a collaborative environment.

5.2 USAID

Data is reported to the Contracting Officer's Representative (COR) for FTF Inova, primarily via quarterly and annual reports. FTF Inova submits quarterly progress reports to USAID and the Development Experience Clearinghouse within 30 days of the end of each quarter, and an annual progress report within 30 days of the end of the FY. These reports detail the achievements in the reporting period, identify challenges encountered and how they were or will be resolved, and list planned activities for the next reporting period.

All data will be submitted to the Feed the Future Monitoring System as well as DevResults, which serves as the USAID Mozambique performance monitoring system. All data is reported in a disaggregated manner, particularly by gender and location, as outlined in the Performance Indicator Reference Sheets (PIRS) in Annex II. Ad hoc reporting of FTF Inova data is provided as requested by FTF Inova's COR.

5.3 Publications and Thought Leadership

In addition to its efforts to create long-term systemic change in target market system functions through its interventions, FTF Inova aims to be a thought leader both within USAID and among the wider MSD community. This process develops over time as FTF Inova's story forms based on its experiences, results, credibility, and wider recognition. Platforms such as MarketLinks and the Donor Committee for Enterprise Development-BEAM Exchange will be targeted for blogs and articles, while communities of practices that revolve around in-person events—such as the Small Enterprise Education and Promotion Network Annual Conference and the Market Systems Symposium—will be priorities as strategic entry points for FTF Inova to share its learning.

Annex 1. Performance Indicators for Reporting

Indicator Type	Level(s)	Indicator	Measures	Disaggregation	Baseline	Target FY 2019	Target FY 2020	Target FY 2021
Custom[25]	System-level	Observed shifts in trust and cooperation between smallholder farmers and other market actors	Sustainable agriculture-led economic growth	Market system function, market actor type	On a 0-3 scale, higher is better. cooperation=1 trust=1	cooperation=1 trust=1	cooperation=1 trust=1	cooperation=1 trust=1
EG.3.2-26 disaggregation	Agent-level	Value of annual sales of farms and firms receiving USG assistance	Inclusivity of Agricultural market systems	Sex, age, and type of producer/firm	Results start from 0.	Disaggregates reported under Sub-purpose 2, indicate inclusiveness	Disaggregates reported under Sub-purpose 2, indicate inclusiveness	Disaggregates reported under Sub-purpose 2, indicate inclusiveness
GNDR-2	Agent-level	Percentage of female participants in USG-assisted programs designed to increase access to productive economic resources		None	Results start from 0.	35%	35%	36%
YOUTH-3	Agent-level	Percentage of participants in USG-assisted programs designed to increase access to productive economic resources who are youth		None	Results start from 0.	10%	10%	12%
Custom[26]	System-level	Average Business Model Innovation Index score	Competitiveness of Agricultural Market System	Market system function and by firm	On a 0–1 scale, higher is better. Average=0.28 Median=0.2	0.35	0.37	0.40
Custom	Agent-level	Cumulative number of FTF Inova partners that		None	Results start from 0.	14	18	18

[25] Not reported in DevResults; for internal Activity learning at mid-term and final. See PIRS for more detail on targets.
[26] Not reported in DevResults; for internal Activity learning only.

Indicator Type	Level(s)	Indicator	Measures	Disaggregation	Baseline	Target FY 2019	Target FY 2020	Target FY 2021
		continue to independently pursue activities that support the initial agricultural market innovation/change 12 months after the initial pilot has ended						
EG.3.2-26	Agent-level	Value of annual sales of farms and firms receiving USG assistance		Type of product or service, type of producer/firm, sex, age	4,693,586	6,353,526	6,988,879	7,624,232
Custom[27]	Agent-level	Number of farmers who have a new/improved commercial relationship with partner firms	Strength of commercial relationships (between firms and with SHFs)	Sex and age of farmers	3,596	12,701	13,717	13,971
Custom	Agent-level	Number of FTF Inova partner firms who have new/improved commercial relationship with other firms		Sex and age of proprietor(s)	0 new or improved commercial relationships.	14	18	10
EG.3.2-25	Agent-level	Number of hectares of land under improved technologies or management practices with USG assistance	Improvements in products, services, and practices adopted by market actors	Type of hectare, sex, age, management practice or technology type, commodity	2,215	9,556	10,320	7,740
E.G.3.2-24	Agent-level	Number of individuals in the agriculture system who have applied improved management practices or technologies with USG assistance		Value chain actor type, sex, age, commodity	3,789	8,418	9,091	6,819

[27] Not reported in DevResults; for internal Activity learning only.

Indicator Type	Level(s)	Indicator	Measures	Disaggregation	Baseline	Target FY 2019	Target FY 2020	Target FY 2021
EG 3.2	Agent-level	Number of individuals participating in USG food security programs		Sex, age, type of individual, producer size.	3,928	5,899	6,607	4,719
EG. 3.1-14	Agent-level	Value of new USG commitments and private sector investment leveraged by the USG to support food security and nutrition	Increases in innovation and investment in target agricultural market functions	Funding source	Results start from 0.	1,071,027	2,107,911	1,580,933
EG. 3.2-27	Agent-level	Value of new agriculture-related financing accessed as a result of USG assistance		Type of financing accessed, type of debt, size of the recipient, sex, age	Results start from 0.	416,667	416,667	416,667

Annex II. Performance Indicator Reference Sheets

Performance Indicator Reference Sheet 1		
USAID Development Objective 2: Resilient, Broad-based Economic Growth Accelerated		
FTF Inova Purpose: Sustainable agriculture-led economic growth		
Name of Indicator: Observed shifts in trust and cooperation between smallholders and other market actors		
Classification: Custom Indicator #1	**TYPE**: Impact	**DIRECTION OF CHANGE**: More is better
DESCRIPTION		
Precise Definition(s): *Cooperation* and *trust* refer to the informal rules and expectations in the market systems that govern behavior and set expectations among and between market actors. **Calculation:** Initial qualitative analysis is inductive (open-ended), with follow-on qualitative analysis being deductive based on the dimensions of trust and cooperation identified.		
Unit of Measure: Observed shifts (qualitative)		
Disaggregated by: Market system function, market actor type		
Justification and Management Utility: Shifts in expectations among market actors indicate systemic change.		
PLAN FOR DATA ACQUISITION BY USAID		
Data Collection Method: KIIs		
Data Source: Partner firms and other similar firms in the targeted market systems as well as other relevant reference groups who can attest to prevailing norms.		
Frequency and Timing of Data Analysis & Reporting: Mid-term and Final		
Estimated Cost of Data Acquisition: Low		
Individual Responsible at USAID: COR		
Individual Responsible for Providing Data to USAID: COP and M&E Manager		
DATA QUALITY ISSUES		
Dates of Data Quality Assessments: 2019, 2020		
Known Data Limitations and Significance (if any): N/A		
Actions Taken or Planned to Address Data Limitations: N/A		
PLAN FOR DATA ANALYSIS, REVIEW & REPORTING		
Data Analysis and Presentation: Initial qualitative analysis will be inductive (open-ended), with follow-on qualitative analysis being deductive based in the elements of trust and cooperation identified. Results reported through baseline, mid-term and final FTF Inova reports.		
Data Use: Share progress and results with USAID and program management for effective decision-making on interventions		
Reporting of Data: Annual report (when available); not included in DevResults as it is used for internal learning		
OTHER NOTES:		
Notes on Baselines/Targets: Baseline data gathered in market system baselines through qualitative interviews with partner firms and other similar firms in the targeted market system functions, as well as other relevant reference groups who can attest to prevailing norms. The baseline studies identify the existing norms, as well as desired shifts. These may be refined as the FTF Inova team better understand each market system function.		

PERFORMANCE INDICATOR VALUES			
Year	**Target**	**Actual**	**Notes**
FY 2017 (Baseline)	N/A	N/A	
FY 2018	N/A	Cooperation 1, Trust 1	Market system baseline scoring of the dimensions of cooperation (belief in importance of relationships and belief in mutually beneficial gains) resulted in overall score of 0.6875, rounded up to 1. Similarly, dimensions of trust (integrity, competence, reliability) resulted in overall score of 0.70833, rounded up to 1.

FY 2019	Cooperation 1, Trust 1		As FTF Inova and partner firms probe, we are uncertain of how and how much dimensions may shift. Movement forward is anticipated and sought rather than backward motion, which is why the target proposes to maintain the overall market system baseline actual.
FY 2020	Cooperation=1 Trust=1		
FY 2021	Cooperation=1 Trust=1		

THIS SHEET WAS LAST UPDATED ON: 2/8/2019

Performance Indicator Reference Sheet 2

USAID Development Objective 2: Resilient, Broad-based Economic Growth Accelerated

FTF Inova Sub-Purpose: Agricultural market systems are more competitive

Name of Indicator: Average Business Model Innovation Index score

Classification: Custom Indicator #2	**TYPE:** Outcome	**DIRECTION OF CHANGE**: Higher is better

DESCRIPTION

Precise Definition(s): Business model innovation: incremental innovations and adaptations made by businesses over the previous six months across 13 aspects of a business model divided into four categories (product/service innovations, process innovations, marketing innovations, and organizational innovations).

Calculation: Each FTF Inova partner business is assigned scores in each of the categories of the index. The sum of the weighted scores is then taken for each. The indicator averages the scores of all of the surveyed firms.

Unit of Measure: Index score

Disaggregated by: Market system function and by firm

Justification and Management Utility: The index allows FTF Inova to gauge the innovations of the business models it supports.

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Surveys with targeted firms

Data Source: Target firms

Frequency and Timing of Data Analysis & Reporting: Semi-annual; at the end of each partnership

Estimated Cost of Data Acquisition: To be determined

Individual Responsible at USAID: COR

Individual Responsible for Providing Data to USAID: COP and M&E Manager

DATA QUALITY ISSUES

Dates of Data Quality Assessments: 2019, 2020

Known Data Limitations and Significance (if any): N/A

Actions Taken or Planned to Address Data Limitations: N/A

PLAN FOR DATA ANALYSIS, REVIEW & REPORTING

Data Analysis and Presentation: Index scores presented in graphs/tables

Data Use: Gauge the degree to which FTF Inova supported business models support competitiveness and inclusiveness.

Reporting of Data: Annual report (when available); not included in DevResults as it is used for internal learning

OTHER NOTES:

Notes on Baselines/Targets: There is no baseline score.

PERFORMANCE INDICATOR VALUES

Year	Target	Actual	Notes
FY 2017 (Baseline)	N/A	N/A	
FY 2018	N/A	Average BII score of 0.28 and median BII score of 0.2 (on a 0-1 scale) among sampled firms.	
FY 2019	0.35		Expected that the level of innovation improves with FTF Inova assistance as FTF Inova gets to a full portfolio.
FY 2021	0.37		

FY 201	0.40		

THIS SHEET WAS LAST UPDATED ON: 2/8/2019

Performance Indicator Reference Sheet 3

USAID Development Objective 2: Resilient, Broad-based Economic Growth Accelerated

FTF Inova Sub-Purpose: Agricultural market systems are more competitive

Name of Indicator: Cumulative number of FTF Inova partners who continue to independently pursue activities which support the initial agricultural market innovation/change 12 months after the initial pilot has ended

Classification: Custom Indicator #3	**TYPE**: Outcome	**DIRECTION OF CHANGE**: More is better

DESCRIPTION

Precise Definition(s): Cumulative number: including all partners over the lifespan of FTF Inova.
Agricultural market innovation: an FTF Inova-promoted initiative that contributes to FTF Inova's objectives.
Independently pursue: without FTF Inova or other donor-funded initiative support.

Calculation: Sum of all partners that continue to support an FTF Inova-supported initiative 12 months after it ended.

Unit of Measure: Number of partners

Disaggregated by: None

Justification and Management Utility: Continued independent investments in agricultural market initiatives 12 months after the initial investment is an indication of sustainable change.

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: KIIs with targeted firms

Data Source: Target firms

Frequency and Timing of Data Analysis & Reporting: Annually after year two

Estimated Cost of Data Acquisition: Low

Individual Responsible at USAID: COR

Individual Responsible for Providing Data to USAID: COP and M&E Manager

DATA QUALITY ISSUES

Dates of Data Quality Assessments: 2019, 2020

Known Data Limitations and Significance (if any): N/A

Actions Taken or Planned to Address Data Limitations: N/A

PLAN FOR DATA ANALYSIS, REVIEW & REPORTING

Data Analysis and Presentation: Incremental number of partners by market system function

Data Use: To understand progress in catalyzing sustainable change. Early successes will inform later program support.

Reporting of Data: Annual report (after year two); reported in DevResults, but without disaggregation by district

OTHER NOTES:

Notes on Baselines/Targets: Baseline collected from FTF Inova records. The baseline includes all partners who have FTF Inova pilots that have ended.

PERFORMANCE INDICATOR VALUES

Year	Target	Actual	Notes
FY 2017 (Baseline)	N/A	0	
FY 2018	0	0	
FY 2019	14		
FY 2020	18		
FY 2021	18		

THIS SHEET WAS LAST UPDATED ON: 2/8/2019

Performance Indicator Reference Sheet 4

USAID Development Objective 2: Resilient, Broad-based Economic Growth Accelerated

FTF Inova Outcome: Strengthened commercial relationships (between firms and with SHFs)

Name of Indicator: Number of farmers who have a new/improved commercial relationship with partner firms

Classification: Custom Indicator #4	**TYPE**: Outcome	**DIRECTION OF CHANGE**: More is better

DESCRIPTION

Precise Definition(s): Commercial relationship: an interaction that involves the exchange of goods or services.
New: a commercial relationship that did not previously exist.
Improved: a commercial relationship that is better than it was previously in terms of increased formality, or increased quantity or quality of provision of goods and services (e.g., information, credit, insurance).

Calculation: Sum of the number of farmer businesses reported to engage with new/improved relationships.

Unit of Measure: Number of farmers

Disaggregated by: Sex and age of farmers

Justification and Management Utility: Increased number of new/improved relationships is an indication of strengthened market integration and function.

PLAN FOR DATA ACQUISITION BY USAID

Data Collection Method: Firm reporting

Data Source: Firms; KIIs

Frequency and Timing of Data Analysis & Reporting: Annually

Estimated Cost of Data Acquisition: Medium

Individual Responsible at USAID: COR

Individual Responsible for Providing Data to USAID: COP and M&E Manager

DATA QUALITY ISSUES

Dates of Data Quality Assessments: 2019 and 2020

Known Data Limitations and Significance (if any): N/A

Actions Taken or Planned to Address Data Limitations: N/A

PLAN FOR DATA ANALYSIS, REVIEW & REPORTING

Data Analysis and Presentation: Number of farmers linked to firm partners in graphs/tables

Data Use: Share the progress with USAID on strength of commercial relationships

Reporting of Data: Annual report; not included in DevResults as it is used for internal learning

OTHER NOTES:

Notes on Baselines/Targets: Baseline will be 0.

PERFORMANCE INDICATOR VALUES

Year	Target	Actual	Notes
FY 2017 (Baseline)	N/A	0	
FY 2018	1,021	3,596	
FY 2019	12,701		
FY 2020	13,717		
FY 2021	13,971		

THIS SHEET WAS LAST UPDATED ON: 2/8/2019

Performance Indicator Reference Sheet 5		
USAID Development Objective 2: Resilient, Broad-based Economic Growth Accelerated		
FTF Inova Outcome: Strengthened commercial relationships (between firms and with SHFs)		
Name of Indicator: Number of FTF Inova partner firms who have new/improved commercial relationships with other firms		
Classification: Custom Indicator #5	**TYPE**: Outcome	**DIRECTION OF CHANGE**: More is better
DESCRIPTION		
Precise Definition(s): Partner firms: firms with which FTF Inova has a signed agreement. Commercial relationship: an interaction that involves the exchange of a good or service. New: a commercial relationship that did not previously exist with the other firm that helps to further FTF Inova's objectives. Improved: a commercial relationship that is better than it was previously in terms of increased formality, or increased quantity or quality of provision of goods and services (e.g., information, credit, insurance). **Calculation:** Sum of the number of firms with new or improved relationships.		
Unit of Measure: Number of firms		
Disaggregated by: Sex and age of proprietor(s)		
Justification and Management Utility: Increased number of new/improved relationships is an indication of strengthened market conduct among actors.		
PLAN FOR DATA ACQUISITION BY USAID		
Data Collection Method: Firm reporting		
Data Source: Firms		
Frequency and Timing of Data Analysis & Reporting: Annual		
Estimated Cost of Data Acquisition: Medium		
Individual Responsible at USAID: COR		
Individual Responsible for Providing Data to USAID: COP and M&E Manager		
DATA QUALITY ISSUES		
Dates of Data Quality Assessments: 2019 and 2020		
Known Data Limitations and Significance (if any): N/A		
Actions Taken or Planned to Address Data Limitations: N/A		
PLAN FOR DATA ANALYSIS, REVIEW & REPORTING		
Data Analysis and Presentation: Number of firms linked to other firms by commodity and firm type		
Data Use: Share progress with USAID on strength of commercial relationships		
Reporting of Data: Annual report; included in DevResults but not disaggregated by district		
OTHER NOTES:		
Notes on Baselines/Targets: Firm baseline data gathered in baselines using KIIs to assess existing commercial relationships.		
PERFORMANCE INDICATOR VALUES		

Year	Target	Actual	Notes
FY 2017 (Baseline)	N/A	N/A	
FY 2018	0		
FY 2019	14		
FY 2020	18		
FY 2021	10		

THIS SHEET WAS LAST UPDATED ON: 10/26/2018

Annex III. Data Quality Protocols and Assessment Questions

FTF Inova integrates checks on data quality and accuracy from collection to reporting. Data quality protocols are established between the MEL team and field staff members as collection tools are rolled out. FTF Inova also designs and conducts internal Data Quality Assessments (DQAs), retracing data reported back to its origin. For data points reported on key indicators, data collection and analysis methods are reviewed, previous respondents are randomly selected, and the process of collecting and analyzing data from the selected respondents is repeated to verify that the result reported is accurate. Formal internal DQAs are conducted at least once during the life of FTF Inova, with ad hoc, smaller-scale DQAs conducted as problems are identified. To maximize the independence and objectivity of DQAs, the FTF Inova MEL team plans them in advance with short notice to the field team.

USAID policy stipulates that the USAID Mozambique MEL team must conduct a DQA every three years on all of the FTF indicators FTF Inova reports against. The FTF Inova Monitoring and Evaluation (M&E) Manager will work with the USAID Mozambique MEL team as necessary to complete the Mission's required DQA. FTF Inova uses different sampling strategies to collect data and monitor direct and indirect beneficiaries.

Data quality protocols include the following when FTF Inova funds or supports a partner in data collection:

- Where applicable, participatory data collection tool development, and/or pretesting, will be used to ensure that context, biases, and translations are thoroughly considered by those FTF Inova team members in the best position to advise.
- Training of data collectors on appropriate use of tools developed, as well as general good practice on the specific method of data collection.
- Assignment of a field data reviewer—someone separate from the data collector—for each data point being collected. Reviews are done systematically looking for outliers and errors before submitting datasets to the MEL team for further review.
- Before processing and analyzing data collected from field team members, the MEL team first ensures that the data collectors and reviewers have completed their quality checks. The MEL team does an additional review while processing and analyzing data and follows up with data collectors on any outliers and potential errors.
- In select cases, particularly with qualitative data, the international MEL Advisory Team additionally provides quality assurance of data collected and analyzed.

DQA questions include:[28]

- **Validity.** Data should clearly and adequately represent the intended result. Assessment questions:
  - Does the information collected measure what it is supposed to measure? If the linkage is not self-evident (for example, when using a proxy), is the rationale sound, grounded in analysis, and clearly documented?
  - Is there any attribution or contribution of the data to FTF Inova's interventions?
  - Are the people collecting data qualified and properly supervised?

[28] USAID. (2014). Data Quality Assessment Checklist: An Additional Help for ADS Chapter 597. Retrieved from https://www.usaid.gov/sites/default/files/documents/1868/597sad.pdf.

- Are data quality problems clearly described in DQA final reports?

- **Reliability.** Data should reflect stable and consistent data collection processes and analysis methods over time. Assessment questions:
  - Is the indicator clearly and objectively defined?
  - Is a consistent data-collection process used from year to year, location to location, data source to data source?
  - Are there consistent sampling methods or comparable data-collection instruments and procedures in place?
  - Are data-collection and -maintenance procedures periodically reviewed and documented in writing?
  - Are the people responsible for transmitting the data known and trained?
  - Is there backup documentation to verify the raw data collected, stored, and processed?
  - Are the procedures for collection, cleaning, analysis, and evaluation of data quality written, shared, and followed?
- **Timeliness.** Data should be available at a useful frequency, current, and timely enough to influence management decision-making. Assessment questions:
  - Is a data-collection schedule in place that meets program management needs?
  - Are data sufficiently up to date to be useful to FTF Inova?
  - Are data properly stored and readily available?
  - Is the date of the data collection specifically mentioned in the files?
  - Have the data and insights affected subsequent activity planning or implementation?
- **Precision.** Data should have enough to permit management decision-making; for example, the margin of error should be less than the anticipated change.[29] Assessment questions:
  - Is the unit of measurement clear and appropriate for the indicator?
  - Is the data-collection method or tool being used to collect the data fine-tuned or exact enough to register the expected change? (E.g. A yardstick may not be a precise enough tool to measure a change of a few millimeters.)
  - Has an acceptable level of error been established?
  - Are steps taken to identify and correct data errors?
  - Are steps being taken to minimize errors such as sampling, transcription, measurement, and sample representativeness?
- **Integrity.** Data collected should have safeguards to minimize the risk of transcription error or data manipulation. Assessment questions:
  - Is there an established procedure for processing and transcribing the data?
  - Are there proper safeguards in place to prevent unauthorized changes to the data?

[29] As stressed in ADS 201: https://www.usaid.gov/sites/default/files/documents/1870/201.pdf, and by Acumen in the Lean Data Field Guide found here: https://acumen.org/wp-content/uploads/2015/11/Lean-Data-Field-Guide.pdf, market research may not always require the rigor in sampling that scientific research studies and investigations typically seek with at least 90 percent confidence and five percent margin of error.

- Is there any incentive on the part of the data source to not manipulate the data?
- Are there established mechanisms to determine the potential inappropriate manipulation of the data? Is there a system in place to provide independent review of data and results reported?
- Is there a method for detecting duplicate data?
- Is there a method for detecting missing data?

Annex IV. Detailed Guidance on Selected Measurement Tools

Tool 1. Stakeholder Feedback Surveys

This tool helps FTF Inova listen directly to end-beneficiaries, and in doing so, to build the capacity of companies to be more responsive to smallholder needs.

Why Gather Feedback?

Gathering feedback from the intended end customers of partner companies (potential "beneficiaries" of FTF Inova) is vital to see whether innovations will be both used and useful for the SHF market segment. Listening to customers can also be an important source of ideas for how to adapt and improve. For probe monitoring, customer feedback will often be a core leading indicator to measure the value hypothesis—i.e., whether the innovation is likely to deliver value to end customers once they are using it.

> "Monitoring approaches that privilege feedback from stakeholders or make use of participatory methods are particularly valuable in complexity. Complex aspects of systems are characterized by a diversity of perspectives about desired results and pathways to achieve results. Diverse perspectives are important for at least two reasons. First, in complexity, knowledge of the system is partial, and predictability is low. Second, how actors perceive a situation motivates their behavior. Understanding the system from different perspectives will help any single actor create a more holistic and useful picture."
>
> *USAID Complexity-Aware Monitoring—Program Cycle Guidance*

When to Gather Feedback

FTF Inova runs three types of feedback surveys:

1) **Value proposition**. Investigates the reason for purchasing, perceived value for money, and perceptions about product quality. The value proposition survey is provided below.

Figure 8: The Value Proposition Survey

Question	Response Format	Notes
What type of/which products have you purchased?	List of available products	Only ask if company does not have customer-specific purchase records
What volume/value of products did you purchase?		Only ask if company does not have customer-specific purchase records
Why did you decide to purchase these from [Retailer]?	Open Or code against: Price Availability Quality Proximity Reputation Discount Other	Open response not suitable for Short message service (SMS) surveys
Have you used/purchased this product/service before?	No, never Yes, sometimes Yes, frequently	

What do you think about the price of the product?	Poor Fair Good Very good Excellent	
How happy were you with the purchase process	Very dissatisfied dissatisfied Unsure Satisfied Very satisfied	
Can you explain why?	Open	Not suitable for SMS surveys
Would you like to see the product or purchase process improved in any way?	Open	Not suitable for SMS surveys

2) **Customer satisfaction**. Assesses how likely customers are to recommend a product or service, gathers suggestions for improvement, and summarizes customer experience and satisfaction. The customer satisfaction survey is provided below.

Figure 9: The Customer Satisfaction Survey

Question	Response Format	Notes
On a scale of 0-10, where 0 is very unlikely and 10 is very likely, how likely is it that you would recommend [product/services] to a friend or colleague?	0-10	Alternative Net Promoter Score (NPS) is simply to ask very likely to very unlikely along a 5-point scale
How satisfied are you with the product quality?	Very dissatisfied dissatisfied Unsure Satisfied Very satisfied	
Since you started using the product, how have your yields (or appropriate variable) changed?	Greatly improved Slightly improved Stayed the same Got slightly worse Got a lot worse Too early to tell	
Do you plan to buy the product again/next season?	Yes—more Yes—the same Yes—less No Undecided	
Can you explain your response?	Open	Not suitable for SMS surveys
Is there anything else you'd like to tell us?	Open	Not suitable for SMS surveys

3) **Profile check**. Collects key socio-economic demographic information to discover who is being reached, using the Poverty Probability Index (PPI) scorecard for Mozambique[30]. The profile check survey is provided below.

[30] See https://www.povertyindex.org/, although the latest PPI for Mozambique is still under development and a version is available at http://www.simplepovertyscorecard.com/MOZ_2014_ENG.pdf.

Figure 10: The Poverty Profile Check Survey

Question	Response Format	Notes
1. What is the total land size you are currently farming?	Hectares or unit of measurement	
2. In what province does the household reside?	A. Gaza B. Nampula, Niassa, or Zambézia C. Inhambane D. Cabo Delgado E. Manica or Maputo Província F. Sofala G. Maputo Cidade H. Tete	The remaining questions below are fixed PPI questions, they cannot be changed (either in question or response format)
3. How many household members are 15-years old or younger?	A. Five or more B. Four C. Three D. Two E. One F. None	
4. Can the male head/spouse read and write?	A. No male head/spouse B. No C. Yes	
5. What is the main construction material of the floor of the residence? (Enumerator: Observe on your own, and ask respondent only if not obvious)	A. Dirt, rough planks, or other B. Adobe, cement, tile/marble, parquet, or sawed wood	
6. What is the main source of energy for the household?	A. Firewood, candles, oil/paraffin/kerosene, lighting in the residence of the LPG, or other B. Electricity, generator, solar panel, or battery (large or small)	
7. Does the household have a table in good working order?	A. No B. Yes	
8. How many beds and cots does the household have in good working order?	A. None, or one B. Two C. Three or more	
9. Does the household have a television in good working order?	A. No B. Yes	
10. Does the household have a charcoal or electric iron in good working order?	A. No B. Yes	
11. Does the household have a cell phone in good working order?	A. No B. Yes	

These surveys can be administered at:

- **Point of experience**. Discover opinions about the innovation as people access it.
- **Point of use** (**early warning check).** Listen to early adopter satisfaction to ensure services are being used and useful while there is still time to course-correct.
- **Point of uptake.** Understand how services are beginning to affect people's lives and signpost the journey towards outcomes.

- **Scale-up**. Check that the same value is being created as innovations move to new populations and geographies.

Feedback: How?

The surveys are enumerated via SMS, voice (computer aided technology), or face-to-face. Decisions about data collection methods should be made by the MEL team together with the Portfolio Manager and partner company, if applicable, based on considerations of:

- **The speed of response.** SMS and voice can be collected more quickly than face-to-face surveys.
- **The respondent group.** Mobile phone ownership may be low in certain geographies and among certain groups, and literacy rates may be too low for SMS surveys.
- **Company records.** Reliable SMS and voice surveys require the company to have a CRM system or list of current customers to sample from.
- **Cost.** Cost per survey is highest for face-to-face, and lowest for SMS.

The process for carrying out stakeholder feedback surveys is as follows:

1) Agree on the scope of surveys with the partner company (geographic concentration of customers/suppliers).
2) Choose which type of survey to deploy—value proposition, satisfaction, or profile check, or a combination of the three.
3) Adjust/adapt question set as required.
4) Ascertain whether the company has telephone numbers of customers/suppliers. If not, set up a process to collect these numbers over the coming month before beginning data collection. This can be through schemes to encourage agro-dealer record-keeping, competitions encouraging customers to text/call to win a prize, or by placing company/project staff at strategic sales locations to collect details.
5) Engage an external research company to conduct research.
6) Data collection phase
7) Cleaned Excel file returned to MEL team for initial analysis. MEL team presents key facts/figures to Portfolio Manager, who then jointly formulates up to five key insights from the data.
8) Share insights with partner company management. Actions to respond to the findings are priorities, and any follow-up data collection or research is agreed upon.

Tool 2. Partner Customer-Centricity Scorecard

This tool helps FTF Inova make decisions about when to build the capacity of partners to gather evidence and use it for decision-making.

Customer-centricity means deeply understanding your customer needs and fulfilling them better than anyone else[31]. But being customer-centric is not simply about collecting data; it is a strategy to deliver business objectives. In this approach, competitive advantage comes through putting customers first: listening to open and unbiased feedback to iterate a service offering that is fast, credible, and compelling.

[31] Frank van den Driest, Stan Sthanunathan, Keith Weed. (2016). Building an Insights Engine. Retrieved from https://hbr.org/2016/09/building-an-insights-engine.

For FTF Inova, customer- centricity sits at the intersection of what smallholders truly need, the social purpose FTF Inova wants to achieve, and the partner's opportunity to commercialize a customer relationship[32]. The goal of partner evidence-gathering should not be data collection *per se*, but embedding customer centricity as a core behavior diffused across the market system.

The customer-centricity scorecard can be used to diagnose, baseline, and measure organizational progress towards customer-centric business strategy. It is a self-assessment to help reflect on key attributes across the business and set strategic priorities[33]. It is based on a recognition that the move to excellence is incremental, and that creating an insights engine—with a seamless integration of process, technology, and people—is itself a journey. The customer-centricity scorecard is provided below.

Figure 11: The Customer Centricity Scorecard

Part 1. Observed Fact

Guidance: This can be completed by company management. Note that not all elements need to be in place for an effective insights engine. The goal is to reflect on and discuss which are appropriate and feasible to develop.

Question	Response			Ambition for Next Quarter /FY
	No/Never	*Sometimes /Partially*	*Always /Yes*	
Are staff incentives based on customer-related key performance indicators?				
Are business decisions made based on integrating disparate data sets (e.g., in-person interactions, social media feedback, call center data), rather than relying on a single source?				
Is customer-facing data cross-functional (e.g., sales figures are combined with customer satisfaction) and not kept in silos?				
Does a CRM platform—accessed by all staff—present a 'single version of the truth"?				
Are current technology solutions adequate to support the company's information needs?				
Does the company bring data to life, producing narratives that can resonate both internally and externally?				
Do customer insights challenge or even set the direction of company projects and strategy?				

[32] See https://goo.gl/SGpXS8

[33] The customer-centricity scorecard is based on the Millward Brown Vermeer *PulseCheck*, but is tailored to operational reality of enterprises in emerging markets.

Part 2. Reported Perception

Guidance: Questions are answered anonymously by employees (never management). Minimum sample size of 10, and at least one respondent per business unit (accounting, production, distribution, marketing etc.). Management can set targets related to the ambition for the next quarter/financial year.

Question	Response (1-10 scale)	Ambition for Next Quarter /FY
Do you know what customers think, do, need, and want?		
Do you understand the whole customer journey (outside of the specific touch points you have with customers)?		
How empowered do you feel to suggest customizations to service, pricing, distribution or other elements of the marketing mix?		
Do you think the voice of the customer is taken into account in key business decisions?		
How often do you collaborate across other functional units to solve customer challenges/create satisfaction?		
Do you think that customer-centricity is embraced by all units in the company?		
Do you have access to the data you need?		

Tool 3. Systems Health Measurement Survey

This instrument helps FTF Inova assess market systems health on a regular basis. As FTF Inova is implementing its interventions, modules 1-5 will be administered to a sample of market actors every six months while module 6, along with questions on trust and cooperation, will be implemented every year. This interview has a duration of 30 minutes, and the participation of the interviewee is voluntary. The frequency of systems health assessment will be revised based on systems dynamics.

Figure 13: The Systems Health Measurement Survey

Partner's Identification

Province:		District:	Village:
Code:	**A1. GPS Coordinates:**	Latitude:	Longitude:
Market system:		**Actor type:**	
A8. Sex of Owner/Manager (1=Male, 2=Female):		**A9.** Age (Complete year):	
A10. Education [use code]:	0=Never attended school, 1=only can read and write, 2=Primary, 3= Secondary School, 4= Higher Secondary, 5=University 7=Other (specify)		
A11. Contact Person Name:		**A12.** Contact Person Designation:	

Module 1: Relationships

Q1. Does the firm have new/improved commercial relationships with other firms? Answer: 1=Yes; 2=No

Question	Q1a. Number	Q1b. In which commodity?	Q1c. With which firm type?
About Suppliers			
1. How many different suppliers did you buy product from in the past three months?			
2. How many of these suppliers (see question 1) were your suppliers six months ago?			
3. How many of these suppliers (see question 1) were your suppliers 12 months ago?			
About Buyers/Customers			
4. How many different buyers did you sell products to in the past three months?			
5. How many of these buyers (see question 4) were your buyers six months ago?			
6. How many of these buyers (see question 4) were your buyers 12 months ago?			

Module 2: Financial Flows (Maintenance versus Growth)

Question	Response
1. On average, what percentage of your overall revenue do you spend to maintain your operational capacity[34]?	
2. On average, what percentage of your working capital is provided by a trading partner?	
3. In the past six months, what have you done to improve your operational capacity?	
4. On average, what percentage of your overall revenue do you spend to improve your operational capacity?	

Module 3: Delays in financial flows

Questions	Response
1. What percentage of your suppliers do you pay upon delivery?	
2. What percentage of your suppliers do you pay in advance?	
3. On average, how many days in advance?	
4. What percentage of your suppliers do you pay after delivery?	
[5[i]]. On average, how many days after delivery?	
6. What percentage of your buyers pay you upon delivery?	
7. What percentage of your buyers pay you in advance?	
8. On average, how many days in advance?	
9. What percentage of your buyers pay you after delivery?	
[10[i]]. On average, how many days after delivery?	

[i] Part of FTF Inova monitoring delays in financial flows for suppliers and buyers.

Module 4: Information Flows

Please rate the usefulness of information as: 1 = *Very useless, 2 = Mostly useless, 3 = Mostly useful, 4 = Very useful*

E13	**Where do you get the following information?**	**Source:**	**Rate**	**Source:**	**Rate**
E14	Market price	1.		4.	
		2.		5.	
		3.		6.	
E15	Grades and standards and other product requirements	1.		4.	
		2.		5.	
		3.		6.	
E16	New market opportunities	1.		4.	
		2.		5.	

[34] "Operational capacity" is intended to include any use of revenue that maintained the business as it currently was, such as working capital, staff costs, store rent, and transport fees.

		3.		6.	
E17	New ways to improve your business performance	1.		4.	
		2.		5.	
		3.		6.	

Module 5: Stresses and Concerns

What Degree of Stress or Concern do Any of the Following Create for You and Your Business?	Levels of Stress or Concern			
	None	Very Little	Some	A Lot
1. Supplier Loyalty				
2. Logistics/Transportation				
3. Finding ways to grow				
4. Reducing product spoilage				
5. Providing for the family				
6. Losing buyers or suppliers to new market actors				
7. Finding partners to fill big orders				
8. Getting the best price				
9. Complying with government regulations				
10. Motivating suppliers				
11. Satisfying buyers				
12. Improving product quality				

Module 6. Business Innovation

Questions	Responses (Yes, or No)	If **YES,** what has changed in your business?
J1. In the last six months, has your business begun *offering a new product* (or service) to customers or have you *adjusted an existing product* (or service)?		
J2. In the last six months, has *your business changed the way it stores final products* (or services)?		
J3. In the last six months, has your business *changed the way it transports products* (or services)?		
J4. In the last six months, has your business *changed the way it packages its products*?		
J5. In the last six months, has your business *changed the way it grades its products*?		
J6. In the last six months, has your business *changed the way it accesses information about the market* (any information)?		

J7. In the last six months, has your business *changed the way it accepts payments for its products*? What about *the way it pays suppliers*?		
J8. In the last six months, has your business *changed the way it tracks internal finances and/or inventory*?		
J9. In the last six months, has your business *changed its advertising*?		
J10. In the last six months, has your business *changed the number of functions it performs in the value chain* (increased/decreased vertical integration)?		
J11. In the last six months, has your business *changed its hiring strategy*?		
J12. In the last six months, has your business *changed the way/amount it invests in staff capacity*?		
J13. In the last six months, has your business *changed the way/amount it invests in supplier and customer capacity*?		