SCOPE

BEHAVIORAL SCIENCE FOR WICKED PROBLEMS

sistemafutura

INTERNATIONAL RESCUE COMMITTEE

Authored by:
Britt Titus (IRC), Marie Stege (IRC), Ruth Schmidt (Institute of Design) and Alexandra De Filippo (sistemaFutura)

INTRODUCTION: **WHY SCOPE EXISTS**

The world's most pressing challenges—climate change, pandemics, armed conflicts, and humanitarian crises—are more interconnected and complex than ever.

Approximately 2 billion people, or one-quarter of the global population, live in conflict-affected areas, according to the World Health Organization. An even greater number, around 3.6 billion individuals, reside in regions highly vulnerable to climate-related impacts (WHO, 2023).

These crises are not isolated events, but hallmarks of wicked problems that are deeply interwoven, unpredictable, and constantly evolving. Such challenges are tough to address because they lack clear solutions, involve multiple stakeholders with competing interests, and require continuous adaptation rather than a one-time fix.

Organizations like the International Rescue Committee (IRC) often deal with populations situated in fragile contexts and face these wicked problems. The IRC reaches over 34.5 million people each year, many of whom are forced to navigate multiple, overlapping crises that exacerbate one another, rather than single shocks.

These interconnected crises amplify existing vulnerabilities.

Albert Einstein, who founded the IRC after World War II, famously said, "If I had an hour to solve a problem, I would spend 55 minutes defining the problem and 5 minutes solving it" (Spradlin, 2012). Einstein's approach is particularly relevant in humanitarian and development spaces, where donor priorities, conventional needs assessments, and traditional ways of thinking rooted in specific and traditional disciplines (e.g., Political Economy) often shapes problem identification.

Yet the conventional problem-solving methods commonly used by these governments, NGOs, and humanitarian organizations tend to assume linear and time-bound cause-and-effect relationships, which fall short of serving populations in such complex environments.

Likewise, behavioral science approaches, particularly nudges (which have become increasingly mainstream in the past decade), have often focused on narrowly defined, measurable behaviors. These interventions are chosen for their fit with impact evaluations, rather than their potential to unlock more systemic change.

While these interventions have been highly effective in their respective domains and at scale, they tend to focus on measurable, tractable changes rather than systemic transformation.

Furthermore, many of these commonly found nudges, such as reminders or tweaks to choice environments, are tactical. They are also less durable and resilient within adaptive systems.

With funding facing uncertainty and humanitarian needs at an all-time high, there is a pressing need for breakthrough solutions that can better serve crisis-affected populations.

This paper argues that not only can we apply behavioral science to these problems, but these complex problems would also benefit from a *more integrated* use of behavioral science. To address this need, this guidance note will argue for a shift in how behavioral science defines and engages with wicked problems, under conditions of uncertainty and adaptation.

Rather than focusing on micro-behaviors or preconceived notions of the problem, we propose an interdisciplinary approach to behavioral insights that leverages systems thinking, design thinking, and strategy to maximize the impact of interventions. We advocate for identifying **leverage points** within systems, where targeted interventions can create large-scale, cascading change.

This document introduces *SCOPE*: a framework for more effectively applying behavioral science to the world's most wicked and complex problems. *SCOPE* outlines five mindset shifts, five steps, and one real-world example that shows how this framework promotes and enacts lasting solutions for change. A detailed case study applying SCOPE in Niger's seed security crisis is included at the end of this paper to illustrate these concepts in practice.

OVERVIEW OF THE **SCOPE FRAMEWORK**

The SCOPE methodology provides a **practical, participatory, and action-oriented** approach to integrate **behavioral insights with systems thinking, design, and strategy,** identifying **leverage points** where small changes can lead to transformational shifts.

Instead of treating structural barriers and behavioral insights as separate considerations, **we focus on their interrelationships,** ensuring that behavioral science is not just reactive. Instead, it proactively shapes the systems that influence human action.

This document provides the rationale for this approach, while accompanying documents will offer proposed guidance, detailed tools, and examples for how to implement this in practice.

Our methodology consists of a series of simple exercises and frameworks to better SCOPE complex systems and identify strategic opportunities for change (Image 1 below):

Aims	
Set Goals	to identify what the **ideal state** would look like to different key stakeholders, as an initial 'north star' for the rest of the project, to be iterated on through all following steps.
Create Hypothesis	of what **behavioral and structural root causes** are currently hindering that ideal state from becoming a reality, through **meaningfully participatory** methods.
Observe & Listen	to **affected people & key stakeholders**, ensuring they directly influence how goals are defined and challenges are understood in the project. Analyse findings to draw out both **behavioral and structural system elements**, and their inter-relationships.
Picture the System	to **illustrate the links and influence** between actors and their roles, structural and behavioral drivers, and feedback loops.
Evaluate Oportunities	where interventions could create **catalytic and systemic shifts** throughout the system, otherwise known as 'behaviorally-informed leverage points'.

(Image 1: Overview of SCOPE)

WHAT MAKES **SCOPE** DIFFERENT?

To work differently, we must think differently. Consider the last project you worked on and reflect on the following:

- How was the problem your team sought to solve defined?
- How different, or not, was the articulation from similar projects in the past?
- Did it already start with a solution in mind, focusing on ways to adapt it?
- How much time did the team dedicate to defining the problem meaningfully, compared to the rest of the project lifecycle?
- Think of the people who had a significant role in defining the problem: how much direct lived experience of the issue did they have?
- How were community stakeholders engaged in defining the problem, and what meaningful solutions would entail?

Teams are often given a solution and then have to work backwards to identify the problem it solves. This is problematic when it only reflects one aspect of the affected community's needs and often responds more to *our* understanding of their realities and priorities than *theirs*.

Behavioral science recognizes that **human behavior cannot be fully understood or influenced in isolation from the systems in which it operates (Hallsworth, 2023)** and emphasizes the importance of considering "choice infrastructure" when developing behavioral interventions (Schmidt, 2024).

Recent discussions, like **debates over framing policy issues in individual or systemic terms** (Chater & Loewenstein, 2022), have called for moving beyond our focus on individual behavior change toward conceiving of challenges in their full context. Others have developed computational and data-driven approaches (Del Valle et al., 2024) to map system dynamics and simulate interventions before implementation.

Our work builds on these valuable contributions but takes a different approach: rather than expanding or refining the technical tools or proposing more theories available to behavioral scientists, it **rethinks the role of behavioral science in the world's most complex challenges**.

We posit that behavioral science should not limit itself to how interventions are designed; it can also contribute to our understanding of the systems at large, strategically target solutions, and determine what problems the field chooses to address in the first place.

While **systems thinking** already provides powerful tools for mapping complexity and identifying **leverage points, what sets this work apart is *how* we get to those leverage points and the practical implications that emerge from it.** Instead of treating structural barriers and behavioral insights as separate considerations, we focus on their interrelationships by integrating **behavioral science, psychology, and meaningful community participation at every step.**

While traditional systems design focuses attention on **structural factors, feedback loops, and high-level mapping**, this approach prioritizes the **human experiences, motivations, and mental models** that shape how those systems function in practice.

Our analysis concludes with a clear brief on the multi-level interventions that would shift outcomes through leverage points. It also includes insights on how **changing the behaviors of key actors would sustain change**.

Many problem-identification efforts in humanitarian and development work still rely on top-down assessments and closed-ended surveys that validate pre-existing hypotheses, rather than uncovering emergent challenges. These methods are often led by teams rooted in Western, Educated, Industrialized, Rich, and Democratic (WEIRD) research traditions and located far from the populations they aim to serve. As a result, behavioral insights risk being reduced to after-the-fact validations or narrowly focused efforts to boost uptake of pre-selected products or services.

Behavioral science studies have directly demonstrated that international development professionals are prone to cognitive biases such as confirmation bias and ideological priors, despite their mandate to make evidence-based decisions, which can distort their problem assessments and policy choices (Banuri, 2017). Deliberative processes, such as participatory group discussions and structured debate, like those suggested in SCOPE, can counteract these biases by introducing diverse perspectives and reducing frame-dependent errors.

Popular interventions, such as SMS reminders or default settings, may yield short-term behavioral shifts but often fail to address deeper structural and psychological barriers. When impact evaluations focus on measurability over relevance, we risk solving the wrong problems and missing opportunities for lasting change.

SCOPE is different. It begins by engaging communities not as data points, but as co-creators. It reveals what is known and unknown before rushing to define the problem. Additionally, it moves beyond isolated behaviors to identify leverage points where small shifts can catalyze system-wide impact.

By combining behavioral science, systems thinking, and participatory design, SCOPE provides a practical and scalable approach for shaping smarter, more sustainable solutions in complex contexts.

THE FIVE KEY **MINDSET SHIFTS**

For behavioral science to be most impactful in solving wicked problems, SCOPE aims to promote five mindset shifts:

Mindset Shift 1: Define problems for impact as well as evaluation

Conventional behavioral science projects often prioritize "measurability" as a key indicator for deciding what to focus on. While measurability is critical for conducting evaluations, the ease of measurement has less correlation with determining the most important place to intervene in a system, particularly in resource-constrained settings. Excluding things that lack measurability at the beginning of a project may prevent a team from accurately identifying the right pain points for the most transformative change.

Impact evaluations are incredibly useful for decision-making, but they should be used to measure the effectiveness of an intervention *after* we have identified the right point in the system to intervene, not as the deciding factor in determining which problems to address. Prioritizing **impact over evaluation** ensures that we address the root causes, rather than focusing on the most observable and quantifiable behaviors.

Mindset Shift 2: Guide your work with questions, not answers

This step emphasizes the importance of guiding the work with questions rather than fixed answers. Approaching the process through inquiry allows teams to build their understanding of the problem iteratively, creating space to integrate additional voices and perspectives into the foundation of their work.

Where insights or technical expertise do exist, they should be framed as assumptions or hypotheses, rather than conclusions. A crucial part of this approach involves the team adopting a hypothesis mindset, in which they remain open to being proven wrong or adjusting their focus based on what they learn, especially when engaging with communities or stakeholders who have direct, lived experience. For example, framing any articulation of the problem statement as a 'hypothesis' throughout the process can help ensure that project facilitators do not become too attached to any prior explanation or rationale. This helps ensure that teams remain flexible, open to revision, and less likely to become overly attached to early interpretations.

By orienting the learning agenda around questions—what is known, what is assumed, and what remains uncertain—teams can continue refining their understanding over time. This approach both broadens the evidence base and reduces the risk of confirmation bias, while supporting a more grounded and inclusive exploration of complex systems.

Mindset Shift 3: Engage communities from the start, not just for validation.

Instead of consulting communities only after defining research questions, practitioners should engage them early to identify which problems matter most and what success looks like. Encouraging early engagement ensures interventions are contextually relevant, culturally appropriate, and more likely to have a lasting impact. Communities are more likely to adopt solutions when we integrate their perspectives and preferences.

This means moving beyond tokenism to genuine co-design, valuing lived experience alongside technical expertise. For example, IRC has used community design groups (or "community advisory boards") to build trust and ensure local insights shape projects throughout their lifecycle. This ensures that interventions are not only informed by community perspectives, but they are also actively influenced, shaped, and refined by those who know and experience the most significant challenges firsthand.

Mindset Shift 4: Use an interdisciplinary approach; look at interrelationships beyond individual behaviors or structural factors

A single issue rarely causes complex challenges; they emerge from interconnected behavioral, social, and structural forces. Addressing them requires a broad perspective that goes beyond narrow disciplinary lenses. By combining behavioral science with systems thinking, human-centered design, future thinking, and strategy, we can develop a more complete understanding of a system and the forces that shape it.

This interdisciplinary approach helps teams identify relevant actors, assets, and influences, as well as the direct and indirect connections between them, and how these relationships evolve. Rather than viewing behaviors in isolation, we consider how mental models, institutional structures, social norms, and shocks (like climate or conflict) interact and reinforce one another. For example, social norms may limit access to resources, or structural constraints may restrict individual capacity.

This approach helps avoid the false choice between targeting individual behaviors or systemic structures. The most effective interventions often address both upstream and downstream factors, shaping system-wide policies while also enabling sustainable behavior change. A multi-layered strategy might simultaneously shift norms, redesign infrastructure, and support new individual decisions.

By integrating across disciplines and levels, we move from fragmented fixes toward coherent, system-aware solutions–interventions that are not only more scalable, but also profoundly transformative.

Mindset Shift 5: Choose leverage points, not tractable behaviors

Traditional behavioral science often focuses on observing and nudging individual behaviors. This involves measurable and tractable parts of the problem, the low-hanging fruit at the margins. While this focus on micro-behaviors can still achieve results, it may not be the most effective strategy in low-resource, complex environments. It can limit the potential impact of behavioral science.

Instead, we should identify **leverage points** where interventions can create cascading change *before* identifying the specific behaviors we seek to influence. While a 'target behavior' is a specific action that can be directly influenced, a leverage point represents a deeper systemic factor that, if changed, has the potential to shift the entire system. Since behavioral science interventions typically have small to medium effect sizes, it is all the more important to ensure those shifts happen at critical junctures, rather than at the margins of an issue; it is more valuable to have a 5% effect size on something that is at a *leverage* point within the system than something at the margins of a problem. In other words, let's aim to make small changes upstream or at root causes, so that they may have compounding effects through the system or transformational spillover effects.

DEEP DIVE INTO THE **5 SCOPE STEPS**

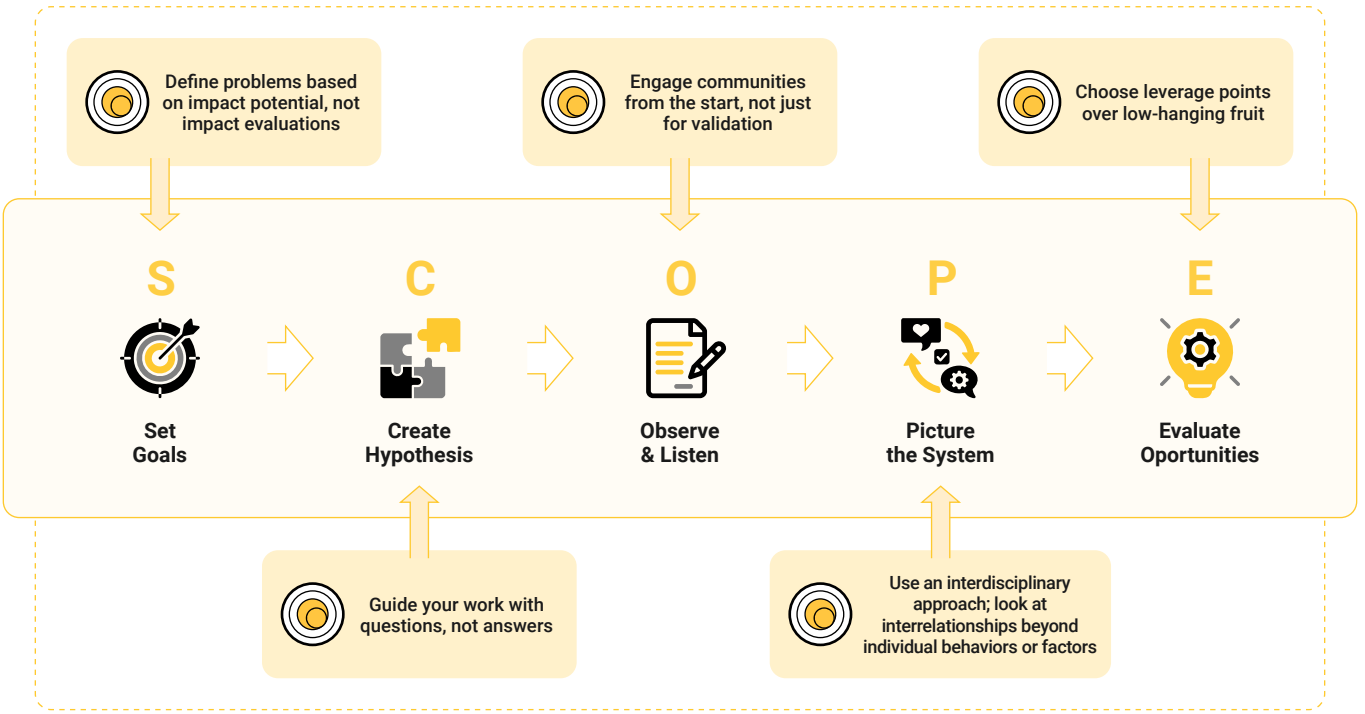
A New Approach: Behavioral Science for Wicked Problems

Mindset shifts sometimes need practical tools and frameworks to put them into action in real-world settings. That is why we have developed the SCOPE methodology to integrate behavioral science with other disciplines such as systems thinking, design thinking, and human-centered strategy: to support teams as they seek to implement these shifts in some of the most complex environments in the world.

This is not a paper on how to do "systems thinking" or replace "design thinking"—these disciplines have excellent approaches and well-respected frameworks.

Instead, it provides guidance on how individuals with behavioral science skill sets, and others looking to utilize an integrated approach for complex challenges, can leverage their understanding of human psychology, theory, and evidence to identify the most critical intervention points within a system—maximizing the likelihood of transformative change for those who need it most.

The practical methodology consists of five key steps, which together form the **SCOPE framework**:



Step #1: Set Goals

Define the ideal state of a system in collaboration with communities and other key stakeholders who have lived experience, rather than focusing solely on fixing known problems. This helps teams agree on a shared vision and envision transformational change rather than tweaking at the margins.

Step #2: Co-create a learning agenda

This step is about mapping what we *know*, what we *assume*, and what we still *need to learn* about the gap between the current state and the ideal one. Rather than rushing to define the problem or settle on fixed hypotheses, teams surface key questions and lines of inquiry—behavioral, structural, systemic, and psychological—that can guide learning and research. The goal is to co-create a learning agenda that helps clarify:

- What do we already know? Whose perspectives are missing, and who should we be learning from?
- What do we assume, but haven't tested?
- What do we genuinely not know and need to explore further?

The most powerful research starts with real questions. This process encourages teams to distinguish between internal assumptions and true knowledge gaps. A thoughtfully crafted learning agenda serves as a compass for the next phases of research and ideation.

To the extent possible, collaborators with both lived and professional experience of the issue should complete this step. Early engagement with frontline staff, community advisors, or other relevant actors can help illuminate blind spots and shape a more grounded, shared understanding of what needs exploration. The goal at this stage is not full representation or comprehensive inclusion—more direct community engagement will follow in the next phase. However, involving those directly affected in early stages can help surface blind spots, ground inquiry in lived realities, and enrich the emerging research agenda.

Step #3: Observe & Listen

This step deepens engagement with affected communities through participatory research to explore, validate, and challenge the hypotheses, questions, and assumptions surfaced earlier. It is not the first point of contact; instead, it builds on prior collaboration by expanding the conversation to include more diverse perspectives across the target population.

Using open-ended, exploratory questions, teams seek to understand people's daily lived experiences, goals, needs, desires, and challenges, gathering rich insights into how they define success and what they see as the most pressing obstacles. This allows us to continue refining our understanding of the system's ideal state (Step 1) and to investigate the underlying drivers and root causes that may be hindering progress toward it (Step 2). Through methods like interviews, observation, and ethnographic research, this step reveals the mental models, structural barriers, and context-specific dynamics that should inform any future interventions.

The goal is not only to confirm what we think we know, but also to learn about people's real needs, behaviors, and desires—and how the current system shapes them. By doing this, we ensure that the solutions we build are grounded in the realities of those most affected.

Step #4: Picture the System

Map relationships within the system using tools, such as **Causal Loop Diagrams (CLDs)**, to visualize feedback loops, power dynamics, and interdependencies. Other simpler mapping approaches may also be helpful, depending on the context, including actor-network mapping.

Regardless of the tool used, in **Step 4**, the system map should now reflect **goals for the system that have been co-created with communities**, rather than limiting it to the initial objectives set by the team. These goals will have evolved based on insights gathered through participatory engagement, rather than remaining static. Often, different actors may frame their goals in **different ways** or even hold conflicting priorities. Instead of treating these differences as obstacles, the team should **investigate why these variations exist**—understanding the motivations, constraints, and power dynamics shaping each perspective.

The aim is not to force alignment but to **identify areas of convergence and work toward shared, co-created goals**, ensuring that interventions address **the needs and aspirations of those most affected** while considering **the broader system dynamics at play.**

Step #5: Evaluate Opportunities

In this final step, teams identify and prioritize the most promising leverage points—those areas within the system where small, well-placed shifts can unlock disproportionate and cascading impact. This involves analyzing patterns that emerged from systems mapping, lived experience research, and behavioral insights to assess where interventions can have the most catalytic effect. Leverage points may lie upstream in structural or policy environments, or downstream in individual behaviors and social norms—and often in the connections between them.

The goal is not to choose the easiest or most measurable intervention, but the one that is most likely to transform how the system functions for those most affected. This step also involves considering feasibility, influence pathways, and how multiple interventions might interact across different system levels. The strongest opportunities are those that align with community-defined goals, address root causes, and create conditions for sustained, adaptive change.

For a practical application of these steps, see the case study on Niger's seed security crisis at the end of this paper.

WHY THIS MATTERS NOW

As wicked problems become more abundant and complex, the resources available to solve them are shrinking. The recent cuts in global foreign aid, alongside changes to the geopolitical landscape, have dramatically limited the sector's ability to provide comprehensive humanitarian support.

Now more than ever, rethinking how we identify problems and where to intervene is particularly important and urgent. Intentionally allocating our limited resources ensures that every intervention maximizes its impact on those who need it most, focusing on the problems that these people define for themselves, to sustain transformational impact far beyond a time-bound or context-bound nudge.

The need for this new approach has never been greater. We are facing an unprecedented number of these wicked problems, from climate change to humanitarian crises, yet resources are increasingly constrained. In 2025 alone, approximately half of aid funding has been frozen or halted, against the backdrop of increasingly escalating climate shocks.

The international community is facing some of the toughest austerity measures in recent history, and we must maximize the impact of our limited resources.

Nudging originally gained popularity during austerity measures following the 2008 economic crisis, but today's challenges demand approaches that go beyond individual behavior change to systemic transformation.

More teams are starting to apply systems thinking, which is a positive shift, but many of these approaches remain theoretical, computational, or focused solely on isolated components of a problem. Given the increasing limitations on funding for international development and humanitarian efforts, we must find more effective ways to tackle these challenges.

How can we identify the most impactful leverage points?

As we enter an era of increasing complexity and uncertainty, behavioral science must rise to the challenge by shifting its focus from **short-term nudges to long-term transformation**. The IRC's interdisciplinary work demonstrates that behavioral insights, when applied at the right level within a system, can drive catalytic change.

THE FUTURE OF BEHAVIORAL SCIENCE IS TRANSFORMATIONAL

The days when behavioral science could be confined to small-scale interventions designed for incremental improvement are gone. By adopting a systems-oriented, collaborative approach, we can ensure that behavioral science is not just reactive, but instead it proactively shapes the world's future.

SCOPE is for those who are ready to work differently.

It is for behavioral scientists, program designers, policy thinkers, strategists, and implementers who feel constrained by the limits of short-term, donor-driven projects or narrowly defined behavior change targets. It is for those who are frustrated by stakeholder-run dynamics or pre-baked problem statements and want a way to bring rigor, complexity, and lived experience into the same conversation. It's also for those who are new to behavioral science but eager to apply its tools to systemic, deeply human challenges.

The future of the field depends on our ability to define and solve problems at the right level.

By embracing impact over evaluation, leveraging interdisciplinary methods, and focusing on systems, we can expand the relevance, credibility, and creativity of behavioral science in the face of our most urgent challenges.

We invite you to explore SCOPE's mindset shifts and apply the methodology in your own context. Test it on a thorny design challenge, a stuck strategy, or a cross-functional team that needs clarity. Because the better can co-define problems and learn to see systems and the people within them, the more leverage we can unlock to create lasting change.

ADDENDUM
Case Study: Behavioral Science in Niger's Seed Security Crisis

Photo by International Rescue Committee / Niger 2025

In Niger's Diffa region, farmers face overlapping crises—climate change, conflict, and economic instability—causing sharp declines in yields and income. Traditional interventions often target measurable behaviors, such as increasing the *uptake* of improved seeds through awareness campaigns or subsidies. While valuable, these approaches often work within the limits of existing systems and miss deeper opportunities for change.

Using the **SCOPE methodology**, the IRC began by co-defining the ideal state of the seed system with communities and stakeholders. The initial goals were to make quality, climate-adapted seeds more **accessible, affordable, and available**. Through co-design, the community expanded this vision to include a third, equally vital goal: the **inclusion of women, youth, and income generation** as part of the system's "ideal state." This reframing helped ensure the project reflected what success looked like from the community's perspective, not only from a technical or economic one.

Mapping the system and observing behavioral dynamics revealed a critical **leverage point: local seed production**. High-quality seeds from national research institutions rarely reached communities, while cheap, low-quality imports from Nigeria flooded markets. NGO-distributed seeds—though better—were costly and often misaligned with local cooking, taste, and cultural preferences. Farmers preferred traditional seeds from neighbors, not because they resisted innovation, but because *trust, visibility, and local proof* mattered more than subsidies or messaging.

Through SCOPE, the team discovered that the **real constraint wasn't demand**, but the *absence of trusted local producers* capable of meeting it. Barriers included lengthy certification processes, low trust in local producers, and few visible role models—especially women—in this sector. Encouraging adoption, therefore, required not just incentives, but local demonstration, participation, and ownership.

The resulting intervention addressed **structural, psychological, and systemic barriers** in tandem. IRC partnered with local producers to establish **community-led seed production** while streamlining certification bottlenecks. To reinforce this, the team piloted **women-led seed boutiques** that sold locally adapted, high-quality seeds. These boutiques built trust through visibility, empowered women as agricultural leaders, and inspired others to participate—creating positive social proof across the community.

By targeting this leverage point, the intervention strengthened the behavioral conditions underpinning adoption—trust, social norms, and access—while improving supply. If the team had taken a standard approach, it might have focused on promoting the uptake of NGO-distributed seeds that were not well-suited to local preferences. Even if demand had increased, these gains would likely have plateaued without sustainable, community-based seed suppliers.

Instead, the SCOPE process helped reframe the challenge, aligning behavioral insights with systems thinking to unlock **cascading, community-driven transformation** in seed access, women's participation, and long-term agricultural resilience.

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