

Breaking Barriers: Applying Implementation science frameworks

Fishbowl discussion

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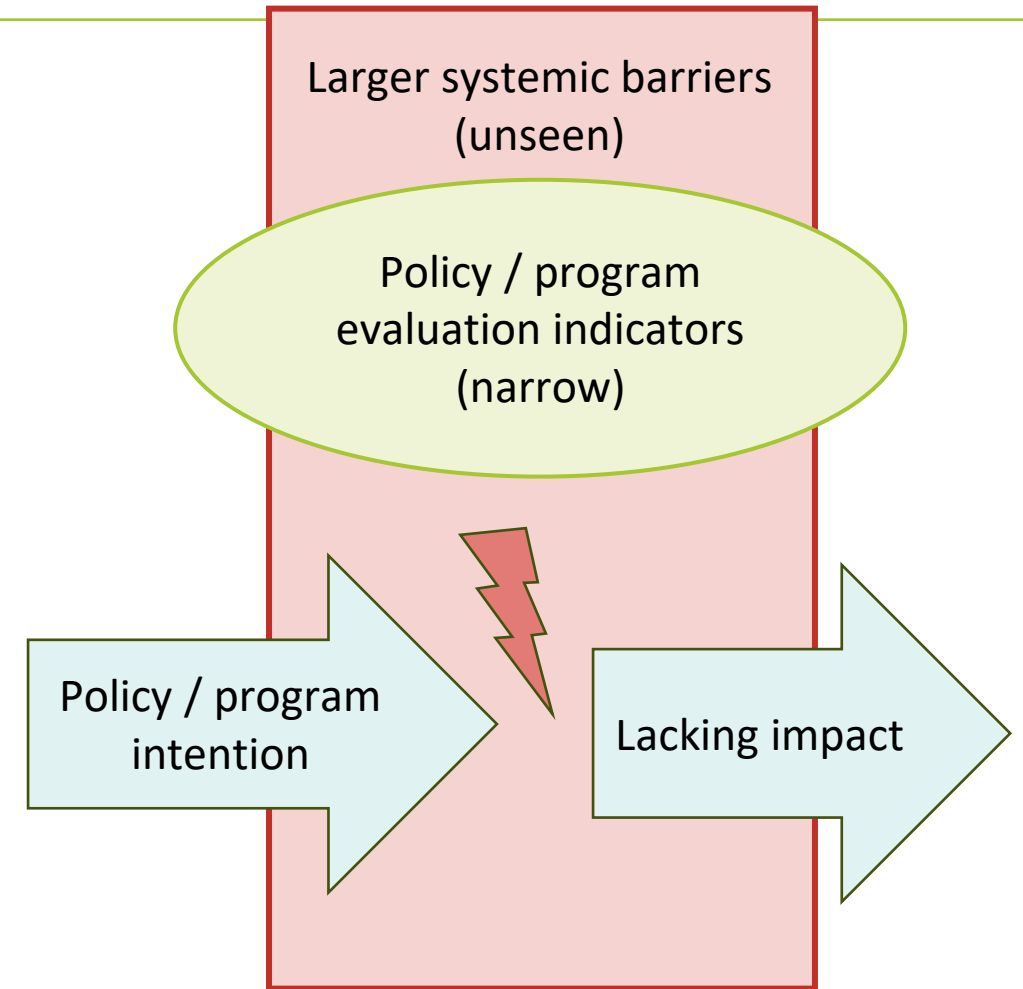
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Why analysing implementation matters

- Climate & energy evaluations often focus on **outputs**
(*e.g., subsidies disbursed, retrofits completed*)
- But they often miss - ***why do policies underperform and don't lead to impacts?***
- Need to identify **barriers:**

systemic, behavioral, financial



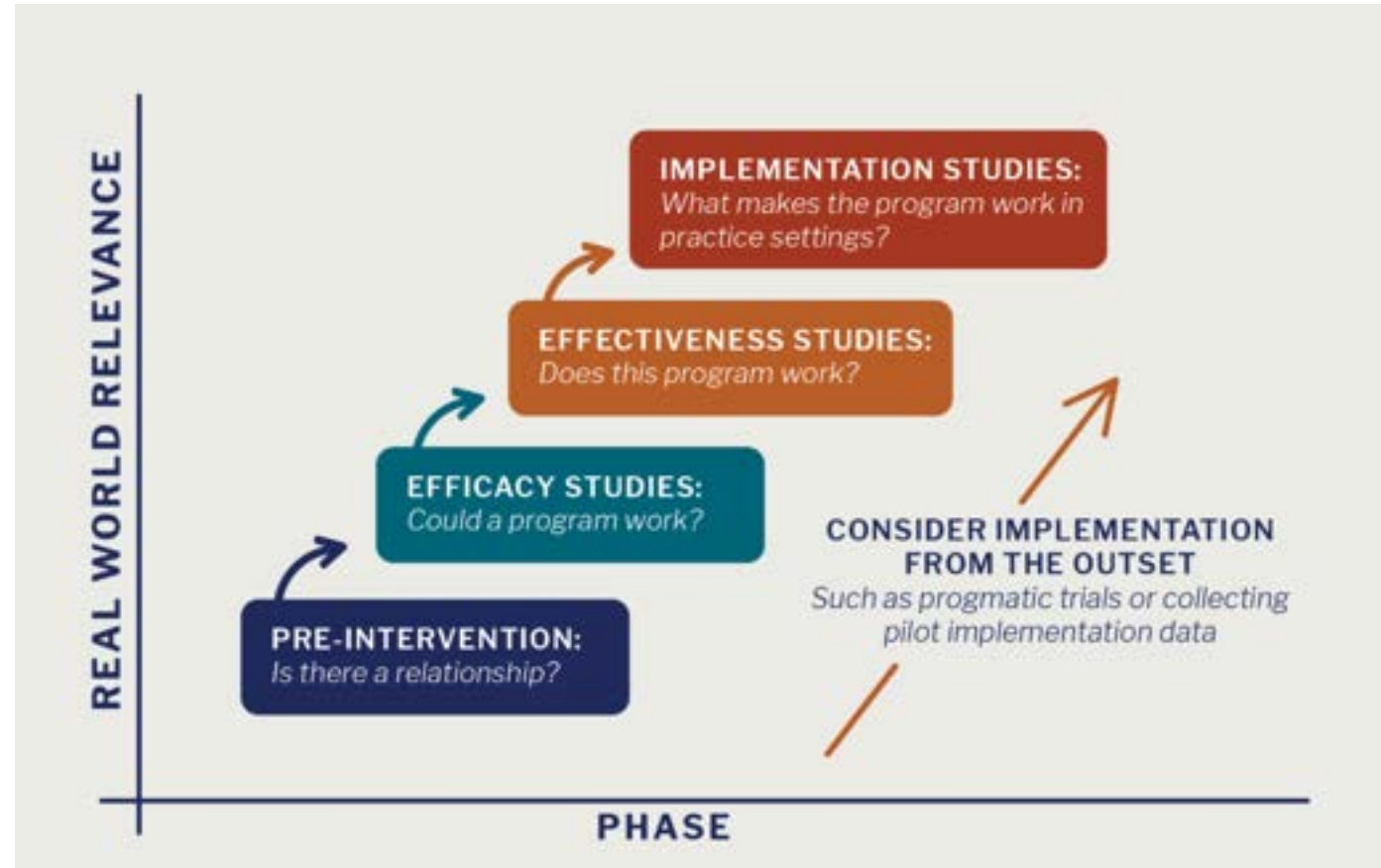
Implementation science

Origin: public health and science

Focus: *barriers to implementation*, beyond policy efficacy and effectiveness

Structured frameworks for diagnosing challenges

Stages of research and phases implementation research



Source: Figure adapted from Landsverk et al, Chapter 12, figure 12-1.

How does the fishbowl work?



- **Inner circle:** discusses topic
- **Outer circle:** listens, observe, takes notes
- Only people in inner circle can speak!
- **Free interventions** – if you want to say something, simply sit in the fishbowl!
- **End:** group reflects together, summarizing key insights

1. Process-based frameworks

- Retrospective approach
- Stages of implementation
- Structured model describing key barriers and facilitators to implementation

Consolidated Framework for Implementation Research (CFIR)



2. Actor-centric frameworks

- Focus on **roles and perspectives of actors** in implementation
- Domains cover
 - individual motivation
 - capability factors
 - physical and social environment



Theoretical Domains Framework (TDF)



Sources of behaviour



TDF Domains

Soc	- Social influences
Env	- Environmental context and resources
Id	- Professional role and identity
Bel Cap	- Beliefs about capabilities
Goals	- Goals, intentions and motivation
Bel Cons	- Beliefs about consequences
Em	- Emotion
Know	- Knowledge
Mem	- Memory, attention and decision process
Beh Reg	- Behavioural regulation
Skills	- Skills

NB. **Nature of behaviours** not considered a source of behaviour (see text for details) and therefore removed from the analysis

3. Theory of No Change (TONC) Framework

Focuses on ***why*** change did ***not*** occur

Four stakeholder groups

- Users / investors
- Supply chain / technical services
- Finance community
- Policy standards community

X

Six barriers

Type of barrier

- Lack of awareness
- Lack of motivation
- Lack of expertise
- Lack of access to technology
- Lack of affordability
- Lack of cost-effectiveness

Strength of barrier



Barrier matrix

Policy measures

Different....

Stakeholders

Barrier types

Strength of
barrier and
trend

	Barrier	District heating		Geothermal		Coal to Gas		Biomass	
		prior to project	2004	prior to project	2004	prior to project	2004	prior to project	2002
Users	Ignorance	↑	↑	↗	↘	↗	↑	↘	↑
	Lack of expertise	↗	↗	↗	↗	↗		↘	↗
	Lack of access to technology	↘	↗	↓	↑	↘	↑	↘	↑
	Lack of cost effectiveness	↘		↑	↘	↗	↗	↘	↘
	Lack of motivation / interest	↘	↑	↘	↘	↘	↑	↘	↑
	Lack of affordability	↓		↗	↗	↓	↘	↘	↗
Supply Chain	Ignorance	↑	↑	↘	↑	↗	↑		↑
	Lack of expertise	↑	↑	↑	↑	↘	↗	↘	↑
	Lack of access to technology	↑	↑	↗	↑	↗	↑		↑
	Lack of cost effectiveness	↑	↑	↑	↓	↗	↑		↑
	Lack of business model	↑	↑	↓	↘	↘		↘	↑
	Lack of affordability	↑	↑	↘	↗	↘		↑	↑
Local Financiers	Ignorance	↗		↗	↗	↘	↑	↘	
	Lack of expertise	↓		↓	↗	↓	↑	↘	
	Lack of cost effectiveness	↓		↘	↓	↘	↓	↓	
	Lack of business model	↓	↓	↘	↓	↘	↘	↓	↓
Policy Makers	Ignorance	↑		↗	↑	↗	↗		
	Lack of expertise	↗		↓	↑	↗	↗	↗	
	Lack of motivation / interest	↗		↑	↑	↑	↑	↘	↑
	Lack of affordability	↘		↑	↓	↓	↗	↑	↑

Barrier Matrix
applied

4. Typological Frameworks

- Identifies **barriers and associated risks types** which hold back private sector investment in renewable energy
- Assists policymakers to develop **targeted public interventions** to address these risks

Derisking Renewable Energy Investment Framework (DREI)

Table E.1: Summary table of public instruments to promote investment in solar mini-grids in Kenya

RISK CATEGORY	POLICY DERISKING INSTRUMENTS	FINANCIAL DERISKING INSTRUMENTS
Energy Market Risk	- National off-grid targets, tiered approach to statistics - Build capacity of rural energy agencies - Dual-regulatory regime - Light-touch regime - Minimal self-registration - Comprehensive regime - Well-designed concessions - Regulated tariffs - Technical standards for electricity quality - Technical standards for grid expansion	- Comprehensive regime - Grid expansion compensation scheme
Social Acceptance Risk	Public awareness campaigns	N/A
Hardware Risk	- Certification and standards for hardware - Streamlined customs procedures	N/A
Labour Risk	Programmes to develop skilled labour	N/A
Developer Risk	Government support to improve data sharing and network effects	- Public loans to operators/ credit lines to domestic commercial banks (concessional, hard-currency) - Public guarantees to domestic commercial banks (hard-currency)
End-user Credit Risk	- Facilitate growth of consumer credit data industry - Promote productive use of electricity - Well-designed cellular, mobile money regulations	
Financing Risk	- Reform domestic financial sector to favour green investment - Strengthen investor capacity with solar mini-grids	

Apply the frameworks to
the practice

1. Eco Design: The Light Bulb Ban – the “original sin” of efficiency policy communication?

- The end of the incandescent bulb in 2009 was not just a technical measure — it was the spark that ignited the first major culture war around efficiency
- Could a ban like this survive today’s post-factual politics discussions?
- Or was it only possible in the world before Trumpism and TikTok?



2. EED I: Efficiency First – right principle, wrong practice?

- Efficiency First was meant to put demand-side solutions on equal footing — but did the catchy slogan outpace the policy reality?
- What does it take to operationalize Efficiency First so it becomes more than a bumper sticker — and actually rewires decision-making?



3. EED II: The German Energy Efficiency Law – subsidiarity vs. gold-plating

- When subsidiarity meets political spin: “gold-plating” as a weapon
- This is where EU policy design collides with national politics: how implementation debates can make or break the credibility of Europe’s efficiency agenda



Thank you for your attention!

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