

**WEBCAST:**  
**An Integrative Framework  
for Implementation Science  
in Nutrition**

**May 2017**



# Implementation Science in Nutrition: Toward a Common Understanding

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# Presentation Goals

- 1. Promote a common understanding of some core concepts in implementation science**
- 2. Provide an integrative framework for implementation science**
- 3. Highlight the need for implementers and researchers to collaborate in order to achieve impact at-scale**

# Outline

- 1. The Implementation Opportunity and Challenge**
- 2. Definitions, Distinctions and Frameworks**
  - Implementation
  - Implementation research and a classification scheme
  - Implementation science
  - Implementation knowledge
- 3. An Integrative Framework for Implementation Science**

# Part I:

# The Implementation Opportunity and Challenge

# The Opportunity



59 countries are leading a global movement to end malnutrition in all its forms.

59 countries and States of Maharashtra and Uttar Pradesh committed to SUN

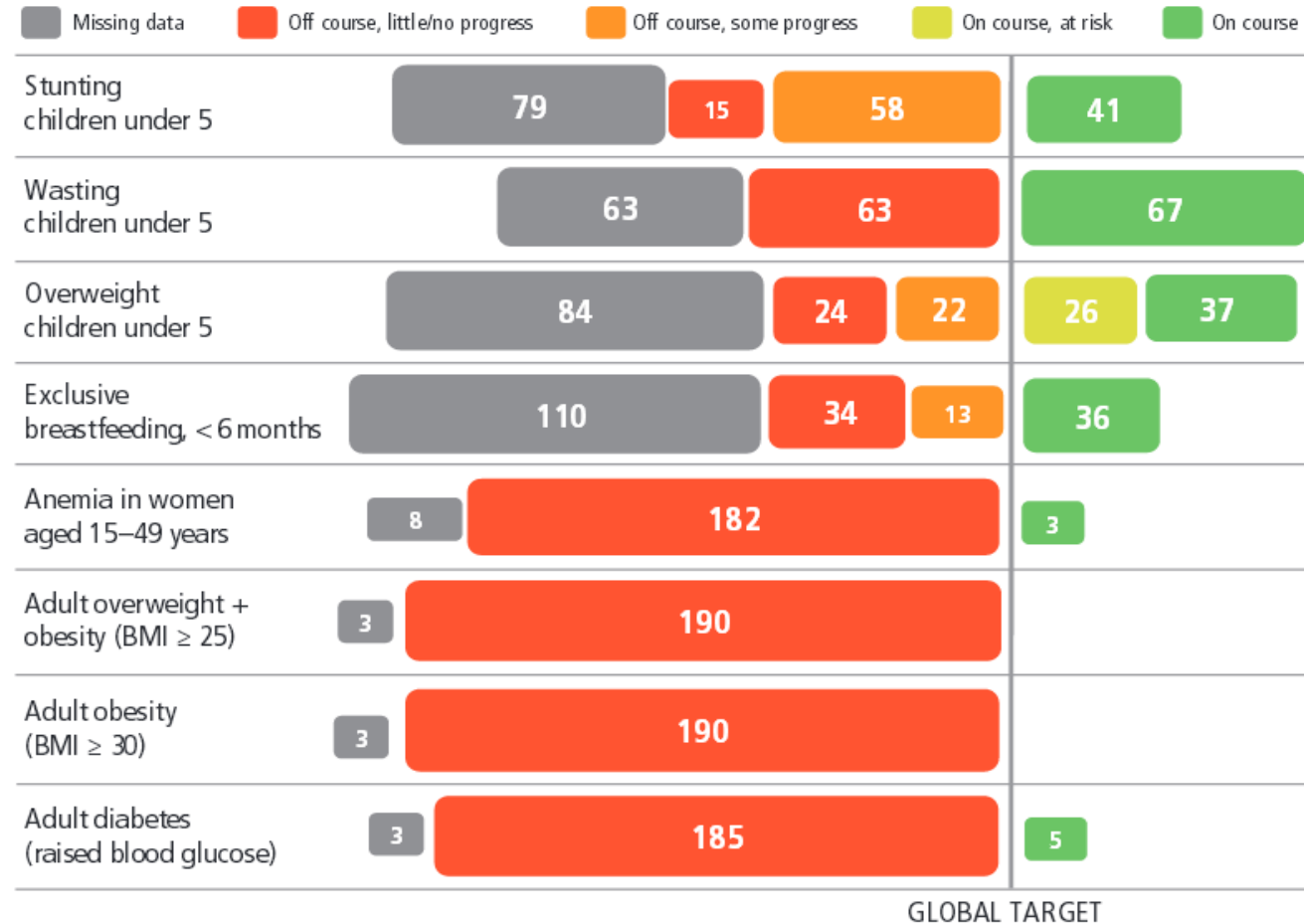


Evolution of Countries and States committed to SUN	
2010	Launch
2011	19
2012	33
2013	41 + 1
2014	54 + 1
2015	56 + 1
2016	57 + 2



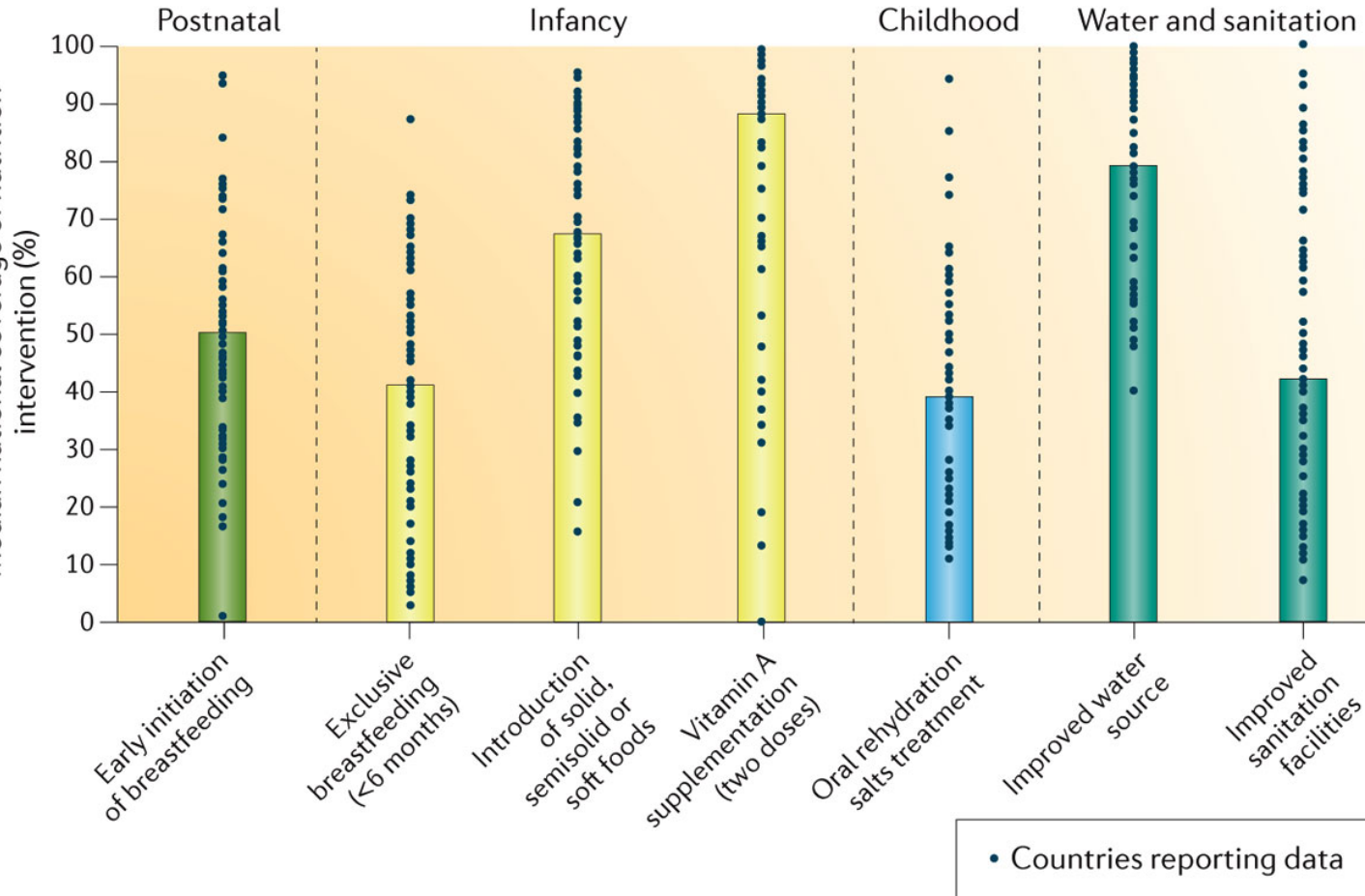
# The Challenge

**FIGURE 2.3** Number of countries at various stages of progress against the global targets on nutrition



Source: Global Nutrition Report 2016

# The Challenge



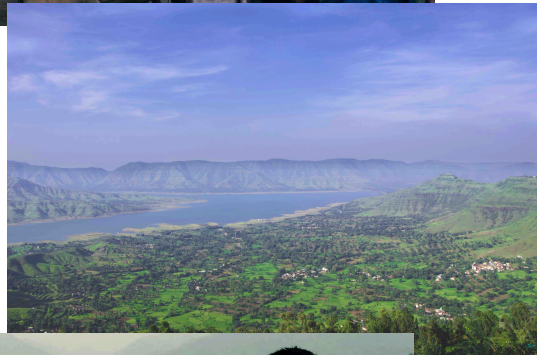
**Figure 1:** Median coverage and distribution by country of selected nutrition sensitive and specific interventions



**An Example:** What factors might affect the effectiveness of a national micronutrient powder intervention?

### A short list:

- Govt approval/registration
- Procurement
- Partner support
- Logistics/ distribution
- Inventory management
- Mother's concerns
- Grandmother's concerns
- Household supplies
- Caregiver knowledge & compliance
- Health worker counseling quality
- Training of health workers
- Broader SBCC initiatives
- etc.



# The Reason for the Challenge

## Nutrition Interventions

## Nutrition Outcomes

**The Black Box  
of  
Implementation**

**Nutritional  
Status**



# The Reason for the Challenge

## Nutrition Interventions



[www.implementnutrition.org](http://www.implementnutrition.org)

## Nutrition Outcomes

### Characteristics, Capacities and Dynamics

#### Implementing organizations

Frontline workers, supervisors and managers

Clients, households and communities

Enabling Environment: Government, funders, civil society, private sector



## Nutritional Status

# Some Sobering Quotes

*Information dissemination alone (research literature, mailings, promulgation of practice guidelines) is an ineffective implementation method, and training (no matter how well done) by itself is an ineffective implementation method.*

(Fixsen et al. 2005)

*The “train-and-hope” approach to implementation does not appear to work.*

(Stokes & Baer, 1977)

# “We know what to do but we don’t know how to do it”

- **97%** of intervention evaluations in Lancet Paper 3 (2008) were small-scale trials testing the efficacy of interventions
  - **with only 3% testing effectiveness at larger scale**
- But stunting can be reduced by **36%** through high coverage of existing interventions

*“We are faced with the paradox of non-evidence-based implementation of evidence-based programs.”*

(Drake, Gorman & Torrey, 2002)

# Part II:

# Definitions, Distinctions and Frameworks

# Why We Need a (Thoughtful) Framework for Implementation Science



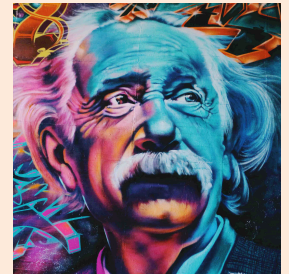
*“If all we have is a hammer, everything looks like a nail”*

- Conventional notions of **“implementation”** may not include all the relevant decisions and processes that affect programmatic effectiveness, scale and quality

Hammer image source: [https://stlong.files.wordpress.com/2011/06/hammer\\_nail.jpg](https://stlong.files.wordpress.com/2011/06/hammer_nail.jpg)

- Conventional notions of **“research”** may not meet the needs of implementers, in terms of the questions, methods, timeliness and dissemination

*“We can not solve our problems with the same level of thinking that created them”* Einstein



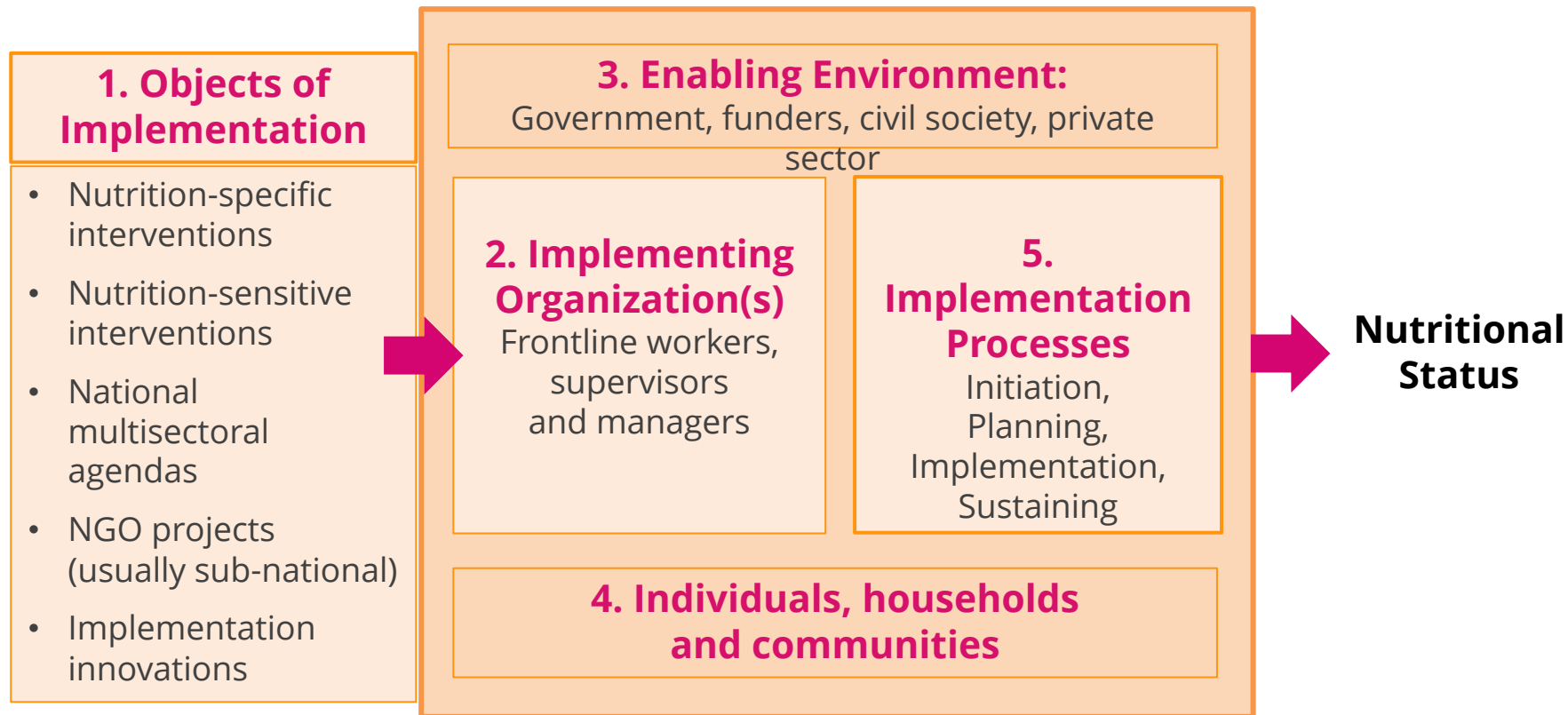
# Implementation

***“Implementation involves systematic and planned efforts within a system (or organization) to introduce and institutionalize a policy, plan, program, intervention, guideline, innovation or practice and ensure its intended effects and impacts.”***

(WHO/TDR Implementation Research Toolkit, 2014)



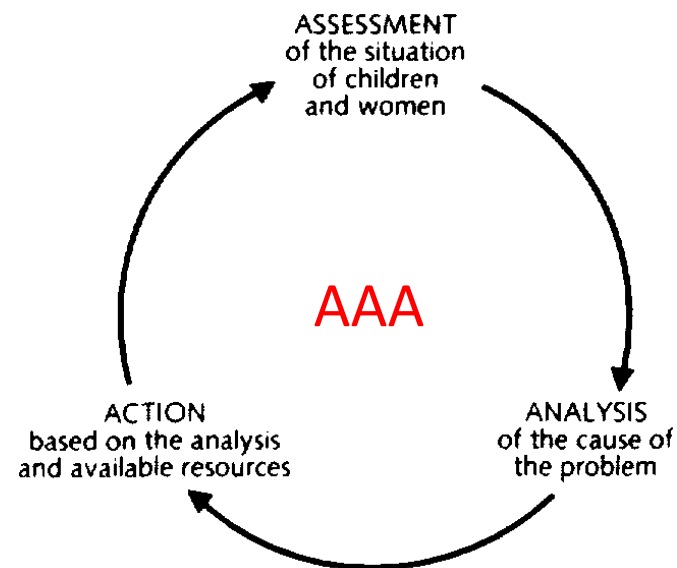
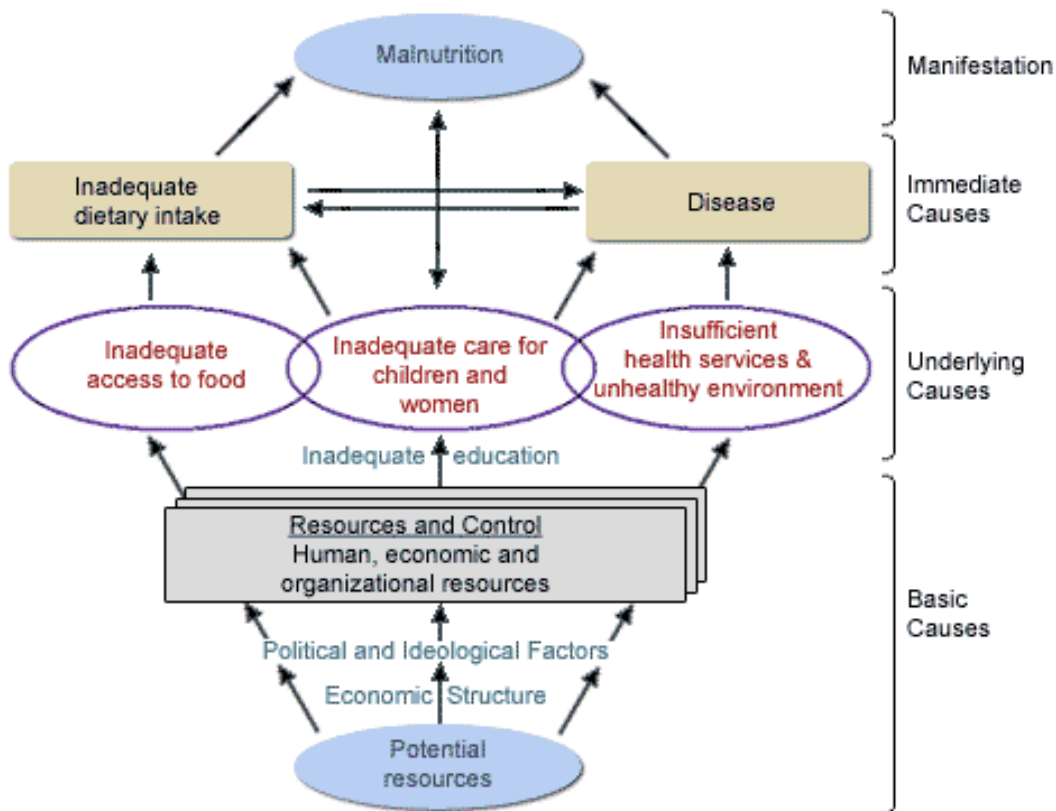
# Opening the Black Box of Implementation (Five Domains)



Adapted from Damschroeder et al.,  
*Implementation Science* 4:50, 2009

# Conceptual Frameworks: Entry Points for Deeper Analysis

## Conceptual Framework of Malnutrition



# SISN's Five Domains of Implementation: *Black Boxes Within Black Boxes*

## 1. Objects of Implementation

Intervention / Innovation / Guideline / Practice / Policy (unadapted)

- Core components
- Peripheral components

**Perceived and Actual:** source, evidence, advantage, adaptability, trialability, complexity, design quality and packaging, cost

## 3. Enabling Environment and Stakeholder Dynamics:

Government and donor policies, practices, resources & regulations, peer/ network influences, national, societal & cultural influences, accountabilities

## 2. Implementing Organizations

### Organizational Characteristics:

- Leadership, commitment, readiness, management, competing pressures and priorities, incentives, compatibility with mission, capacity and resources to adopt, adapt, implement, support, monitor and adjust, accountabilities

### Objects (adapted)

- Core components
- Peripheral components

### Staff (frontline, supervisors and managers):

- Knowledge, skills, beliefs, motivation and incentives, workload, self-efficacy, stage of change, values, intellect, competence, learning style, openness, access to materials and resources, accountabilities

## 5. Implementation Processes

### Initiating, Scoping & Engaging

- assessing fit and readiness with opinion leaders, formal leaders, champions, facilitators, partners

### Planning

- Theory of Change / PIP
- Formative research
- Design & adaptation
- Implementation strategy

### Implementation, Iterative Improvements & Scaling Up

- components, sequence, intensity
- duration, quality improvement,
- process evaluation, operations
- research, special studies
- decisions and adjustments

### Commitment, Support, Financing & Sustainability

- continuous advocacy, networking, engagement, strategizing, vigilance, reporting and documentation

## 4. Individuals, households and communities:

Needs, resources, capacities, social, cultural, behavioral, economic, political factors



# Implementation Research (IR)

***“Implementation research is the systematic approach to understanding and addressing barriers to effective and quality implementation of health interventions, strategies and policies (typically in specific contexts)”***

(WHO/TDR Implementation Research Toolkit, 2014)

# A Classification Scheme of Implementation Research

	Commitment, Support, Financing and Sustainability		
Objects of Implementation	Initiation and Scoping	Planning & Design	Implementation, Iterative Improvement and Scaling Up
Nutrition-specific interventions			
Nutrition-sensitive actions			
Operationalizing a national multisectoral nutrition agenda			
NGO projects (typically sub-national)			
Implementation Innovations			



# A Classification Scheme of Implementation Research

THE SOCIETY  
FOR IMPLEMENTATION  
SCIENCE IN NUTRITION

	<b>Commitment, Support, Financing and Sustainability</b> cross-cutting governance functions that require diverse methods for stakeholder analysis, assessment of advocacy needs and opportunities, costing, capacity assessments, coordination, etc.		
<b>Objects of Implementation</b>	<b>Initiation and Scoping</b>	<b>Planning &amp; Design</b>	<b>Implementation, Iterative Improvement &amp; Scaling Up</b>
<b>Nutrition-specific interventions</b>	diverse forms of assessments, stakeholder analysis, opinion leader research and consultations to guide: agenda setting, identification of policy/program/intervention options and their fit with a) the problem and b) delivery capacities and c) available collaborations/partnerships and d) available resources	diverse forms of formative research and consultations (at multiple scales/administrative levels) to guide the detailed design of policies/programs/interventions and development of detailed implementation guidelines, guided by explicit PIPs or Theories of Change.	diverse forms of operations research, special studies, process evaluation, quality improvement/quality assurance schemes and monitoring and evaluation systems.
<b>Nutrition-sensitive actions</b>			
<b>A national multisectoral nutrition agenda</b>			
<b>NGO projects (typically sub-national)</b>			
<b>Implementation innovations</b>			



# A Classification Scheme of Implementation Research

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	<b>Commitment, Support, Financing and Sustainability</b>		
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<b>Nutrition-sensitive actions</b>			
<b>A national multisectoral nutrition agenda</b>			
<b>NGO projects (typically sub-national)</b>			
<b>Implementation innovations</b>			

Toolkit image source: <http://worldartsme.com>

# A Few Examples of IR in the Published Literature

	<b>Commitment, Support, Financing and Sustainability</b> 18. Prioritizing and Funding the Uganda Nutrition Action Plan 19. Nutrition Leadership: Drivers and Constraints in Four Countries 20. The Gear Model for Scaling Up Breastfeeding		
<b>Objects of Implementation</b>	<b>Initiation and Scoping</b>	<b>Planning</b>	<b>Implementation, Iterative Improvement and Scaling Up</b>
Nutrition-specific interventions	1. Stakeholder Perspectives on Regulating School Food in Mexico	2. Ca and IFA Suppl in Kenya	3. IFA in Pakistan 4. IFA Faltering (DHS)
Nutrition-sensitive actions	5. Stakeholder Perceptions of Nutrition-Sensitive Agric in East Africa	6. National Flour Fortification 7. Landscape Analysis of Nutr-Sensitive Agric in Senegal	
Operationalizing a national multisectoral nutrition agenda	8. Intersectoral Convergence in Odisha, India	9. Governance of MSN in Nepal	10. MSN in Ethiopia and Nepal
NGO projects (typically sub-national)		11. IYCF Behavior Change in Bangladesh 12. Mama Sasha (OFSP) in Kenya 13. IYC Foods in Kenya	14.. HKI Homestead FP in Cambodia 15. QI / PDSA cycles
Implementation innovations	16. MNP Delivery Model in Vietnam 17. Program Assessment Guide (PAG)		



## Part III:

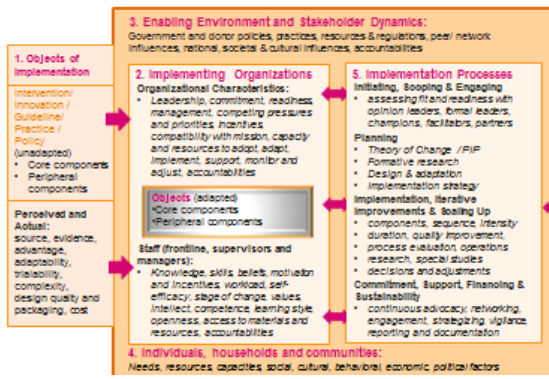
# An Integrative Framework for Implementation Science

*“Implementation research is the systematic approach to understanding and addressing barriers to effective and quality implementation of health interventions, strategies and policies”*

## A Problem with this Construction:

Given the complexity of implementation, and...  
 .....the many, many weaknesses in the five domains, and...  
 .....the inability for implementers to wait for ‘research findings’

- It is NOT feasible to “systematically assess and address (ALL) potential weaknesses within and between each of the five domains during all phases of the implementation process”



### The Practical Solution: Implementation Science and Implementation Knowledge

*“... an interdisciplinary body of theory, knowledge, frameworks, tools and approaches whose purpose is to strengthen implementation quality and impact.”*

*It is NOT just new empirical research – it is “the science of implementation.”*

# Implementation Science and Implementation Knowledge

- A great deal is already known about implementation, such that many of the most common mistakes could be prevented by **applying current knowledge rather than undertaking new investigations;**
- Much of this **current knowledge** has already been packaged into practical tools, frameworks and guidelines that **can be adapted and used in a variety of settings;**
- The **greatest “gap” lies in knowledge utilization**, rather than in generating new knowledge. This knowledge utilization gap exists in nutrition, health, education and most other sectors, and it exists in high income countries as well as low and middle income countries;
- **The most urgent need in nutrition implementation is to close this knowledge utilization gap by making these practical tools, frameworks and guidelines more readily accessible**, through various forms of capacity building, technical assistance, coaching, knowledge brokering and dissemination. This is a research agenda in itself.

# An Integrative Framework for Implementation Science in Nutrition



## The Implementation Knowledge Portfolio

Implementation Science: Existing and Emerging Knowledge About Implementation

2. Implementation Research in Context \*

Frameworks, Tools, Guidelines

Capacity Building, Technical Assistance, Knowledge Brokering, Coaching

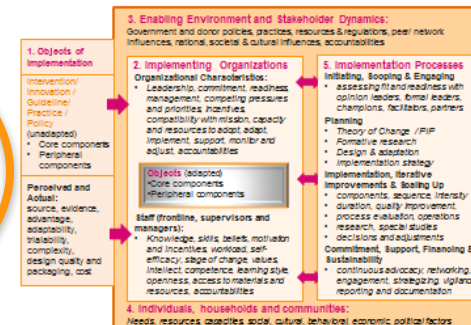
3. Formal and Rigorously Evaluated Implementation Trials, Proofs of Concept and Evaluation of Innovative Implementation Practices

1. Contextual, Tacit and Experiential Knowledge

## The Goal

**Collaboratively Assess, Build on Strengths and Address Weaknesses in Varied Domains in a Timely Manner During All Phases of Implementation**

## Factors Known to Affect Implementation



\* This refers to practical IR embedded in and connected to implementation, such as stakeholder analysis, opinion leader research, formative research, rapid assessments, operations research, special studies, process evaluation, costing studies, Delphi studies and various forms of quality improvement or quality assurance, and more.

# Summary of Key Messages

1. The high level commitment to nutrition now creates an urgent need for large-scale implementation and impact
2. Business-as-usual implementation and business-as-usual research is not sufficient: Both must change. Good examples already exist.
3. The “Integrative Framework” presented here provides a way to improve the quality of implementation in a practical and timely fashion, by systematizing, integrating and utilizing diverse forms of knowledge at all stages of the implementation process
4. SISN provides a mechanism for implementers, researchers and other parties to collaborate in this effort

# Want to find out more about SISN and the benefits of membership?

- Check out our website: [www.implementnutrition.org](http://www.implementnutrition.org)
- E-mail us at: [implementnutrition@gmail.com](mailto:implementnutrition@gmail.com)
- Follow us:  [@implementnutri](https://twitter.com/ImplementNutri)  
 [The Society for Implementation Science in Nutrition](https://www.linkedin.com/company/the-society-for-implementation-science-in-nutrition)

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# Revised Content

**N.B. The content of slides 22-25 and 29 have been revised slightly since the original recording of the webcast.**



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