The Society for Implementation Science in Nutrition (SISN)

Strategic Plan 2016-20

THE SOCIETY
FOR IMPLEMENTATION
SCIENCE IN NUTRITION

Contents

1. Nutrition Problems, Momentum and Challenges

Nutrition-related problems are by far the leading risk factors for morbidity and mortality on a worldwide basis, accounting for nearly 13 million global deaths in 2013. In low- and middle income countries poor nutrition also is responsible for impaired cognitive development, poor school performance, decreased worker productivity and losses to GDP. With greater recognition of these profound consequences, undernutrition is receiving unprecedented attention at global and national levels (as seen in the Sustainable Development Goals) which includes, a target to end malnutrition in all its forms by 2030; the 2013 Nutrition for Growth Compact generating over $4 billion in commitments for high priority nutrition interventions; the Second International Conference on Nutrition with representatives from more than 170 governments; a number of landmark resolutions and targets from the World Health Assembly; and high level commitments from governments in over fifty-five countries in the Scaling Up Nutrition Movement.[1] Along with this increase in political and policy attention, there has been an increasing body of evidence concerning the efficacy of several nutrition-specific interventions as tested in small-scale trials and an increasing interest in multi-sectoral actions to address undernutrition and its underlying determinants.

While this marked increase in awareness, commitment and financing for nutrition is encouraging, the profound challenge now is to translate that momentum into high quality and sustainable implementation and impact at-scale. The size of the challenge is indicated in data from the Global Nutrition Report[1] which attempted to assess the progress towards World Health Assembly nutritional status targets and the coverage of twelve key nutrition interventions. For stunting, wasting, exclusive breastfeeding and anemia the percent of countries on track to meet the targets is 34%, 52%, 41% and 3%, respectively. Reliable data on intervention coverage are available in only a small fraction of countries and for only four of the twelve interventions: zinc treatment with diarrhea, iron-folic acid supplementation, iodized salt in the household and vitamin A supplementation. The median coverage (and the range across countries) are: zinc 1.1% (range 0.1 to 49.1%), iron folic-acid 29% (range 0.4 to 63%), iodized salt 57% (7-97%) and vitamin A 87% (0-99%). These findings highlight, first, the serious gaps in data availability for tracking the implementation of even the highest priority nutrition interventions; and second, the serious inequities in coverage across interventions, across countries and (not shown here) within countries.

The profound challenge now is to translate current momentum in nutrition into high quality and sustainable implementation and impact at-scale.

These statistics reflect the long-standing neglect of two interrelated issues in nutrition: implementation capacities and implementation research. The Society for Implementation Science in Nutrition (SISN) was founded to help address these serious implementation challenges by generating contextually-relevant knowledge regarding implementation, strengthening the capacity for implementation research within countries and ensuring that implementation capacity constraints are a central focus of the work. Further information on the founding of SISN is provided in Annex 1.

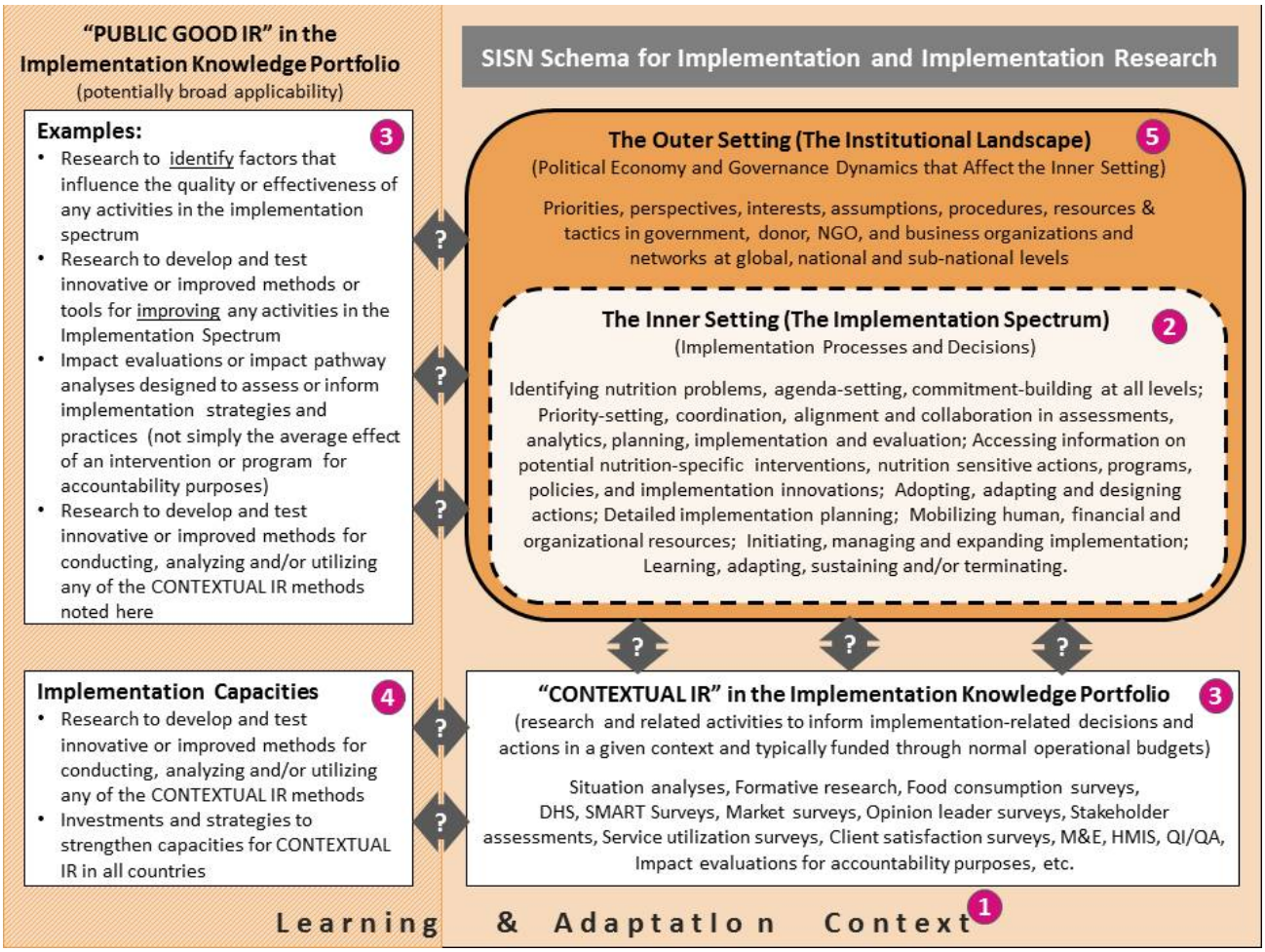
[1] Global Nutrition Report 2015. Washington, DC: IFPRI.

2. The Five Essential Conditions

Efforts to create and sustain impact at scale, whether in nutrition or other aspects of development, must be grounded in an accurate understanding of the nature of implementation itself and the factors that constrain it. five conditions essential for this to occur are presented below (Box 1)and as a schema illustrating the relationships between them and how they underpin our strategic plan (Figure 1).

Box 1. The Five Essential Conditions
1 **Implementation as Learning and Adaptation**: approach implementation as an iterative and continuous, knowledge-intensive process of learning and adaptation, on varying time scales.
2 **The Implementation Spectrum:** include a wide range of implementation decisions, processes and capacities in the implementation research agendas, as well as capacity-strengthening agendas.
3 **The Implementation Knowledge Portfolio:** broaden our understanding and concept of the diverse types of knowledge needed to inform and guide implementation.
4 **Implementation Capacities:** strengthen implementation capacities, including the full range of decisions and processes in the Implementation Spectrum.
5 **The Institutional Landscape**: ensure that the political economy and governance dynamics at global and national (and sub-national) levels are included in implementation research agendas.

Figure 1. SISN Schema for Implementation and Implementation Research (See Annex 2 for further details)



2.1 Implementation as Learning and Adaptation

Fundamental assumptions and approaches to implementation are in a period of transition. For decades, implementation planning has been tacitly based on assumptions of linearity, predictability and control ("the machine view") that have been extensively invalidated through experience, research and scholarship. The contemporary view explicitly recognizes that implementation is a complex socio-technical process in which policies, programs and interventions do not "roll-out" as planned. Rather, they encounter a wide range of social, cultural, bureaucratic, political, capacity and idiosyncratic bottlenecks within and between organizations, administrative levels, communities and households. **The fundamental implication is that implementation must be approached as an iterative and continuous, knowledge-intensive process of learning and adaptation, on varying time scales.** The detailed planning and design of policies and programs remains important, but this must include the detailed planning and design of procedures for learning and adaptation along multiple time horizons as part and parcel of the implementation process.

2.2 The Implementation Spectrum

The second essential condition is that a wide lens be adopted on the range of decisions and processes that are inherent in implementation. These are indicated in the "Inner Setting" (Figure 1, p.3). Any number of these can become bottlenecks or compromise the quality of implementation and many of them are currently constrained by weak capacities at individual, organizational and/or system levels. **The fundamental implication is that a wide range of implementation decisions, processes and capacities must be included in the implementation research agendas, as well as capacity-strengthening agendas - the "Implementation Spectrum."**

2.3 Implementation Knowledge Portfolio

Learning and adaptation during implementation, as well as the planning and design of policies and programs, is a knowledge-intensive process. Nutrition research agendas have historically focused on the *content* of interventions (knowledge of "what" to implement) and there now is a vital need to generate "how-to" knowledge concerning implementation. This broader knowledge portfolio must reflect knowledge of various forms including:

Nutrition research has historically focused on knowledge for "WHAT" to implement - there now is a vital need to generate knowledge of "HOW" to implement

- Global knowledge that has broad relevance and applicability across many settings
- Contextual knowledge that applies first and foremost in a particular setting
- Knowledge or information in real-time (e.g., weeks or months as in quality assurance systems)
- Knowledge in the medium- or longer-term (one or more years)
- Knowledge based on the systematic and rigorous (qualitative and quantitative) methods of conventional scientific research
- A distinct category of knowledge based on the careful documentation and analysis of real-world experiences to identify good or promising practices.

Finally, there is not only a need to generate new knowledge along these lines, there is an equally, if not greater need, to ensure the current and emergent knowledge is *available, accessible and appropriately utilized.*

The fundamental implication is we need to significantly broaden our understanding and concept of the types of knowledge and knowledge-related processes needed to inform and guide implementation – the "Implementation Knowledge Portfolio." This is explicitly noted in the schema (Figure 1, p.3) by acknowledging the need for PUBLIC GOODS IR as well as CONTEXTUAL IR. It is also important to note that in many instances the term "knowledge" is preferred over the term "evidence" because the latter often implies or refers to only formal scientific knowledge, which is a necessary but not sufficient basis for guiding implementation in diverse contexts.

2.4 Implementation Capacities

Implementation capacities are included to emphasize that improved knowledge about implementation (arising from IR and the accumulated knowledge concerning the science of implementation) must be accompanied by improved capacities for accessing and utilizing it, and for managing the many processes and decisions inherent in "implementation." **Thus, the fourth essential condition is for countries and their development partners to strengthen implementation capacities, including the full range of decisions and processes in the Implementation Spectrum.** SISN can play important strategic roles in this regard by advocating for capacity strengthening, synthesizing evidence from implementation science on methods to do so and promoting research aimed at improving the access, uptake and application of research findings by policy makers, implementers and funders.

2.5 The Institutional Landscape

The final essential condition relates to the "Institutional Landscape" for nutrition implementation and nutrition research, at global and national levels. "Institutional landscape" is used here as short-hand for the problematic political economy, governance and fragmentation issues within and among the government, donor, United Nations (UN), non-governmental organizations (NGOs) and research sectors, in addition to the special challenges associated with the private sector. These institutions have a long history in nutrition and, though there are encouraging efforts to address these issues, as seen in the SUN Movement, there remain serious challenges to overcome. These institutional issues originate and/or manifest themselves at both the global and national levels and have a profound influence on all the decisions and processes within the Implementation Spectrum (Figure 1, p.3) and on all the implementation outcomes (effectiveness, efficiency, equity and sustainability). For that reason, **the fifth essential condition is to ensure that the political economy and governance dynamics at global and national (and sub-national) levels are included in implementation research agendas.** A consequence of this is that this research, as with all implementation research, must be conducted in a constructive and collaborative spirit to inform the efforts already underway at global and national levels to strengthen nutrition governance.

3. The Rationale for SISN

The five essential conditions that underpin SISN strategy imply the need for changes in the focus, norms and practices in organizations and systems for implementation as well as in research. These changes are substantial and are unlikely to occur on their own, yet the current landscape does not include an organization committed to articulate, promote and advance this agenda. Addressing this crucially important unmet need is the fundamental rationale for the creation of SISN.

The five essential conditions also have a strong bearing on what kind of organization SISN should be. They require a society whose mission is broader than that for most scientific societies, which typically promote the creation and dissemination of scientific research, first and foremost among disciplinary peers. Just as the necessary changes are unlikely to occur on their own, they also are unlikely to occur by having a society of implementation researchers prescribe and advocate changes to implementing organizations. Such an approach would simply reproduce the current knowledge-to-action gap. Instead, SISN is constituted as a society of researchers *and* implementers who share a common vision, values and goals and who collaborate in various ways to achieve these.

4. Vision and Mission

Vision	A world where actions to improve nutrition are designed and implemented with the best available scientific knowledge and practical experience.

Mission	The Society convenes, advocates, disseminates and promotes dialogue among scientists, policy leaders, government officials, funders and practitioners to advance the science and practice of nutrition implementation world-wide.

SISN is constituted as a society of researchers *and* implementers who share a common vision, values and goals and who collaborate in various ways to achieve these.

5. Values and Guiding Principles

The Society is committed to deliver its objectives under the following values and guiding principles:

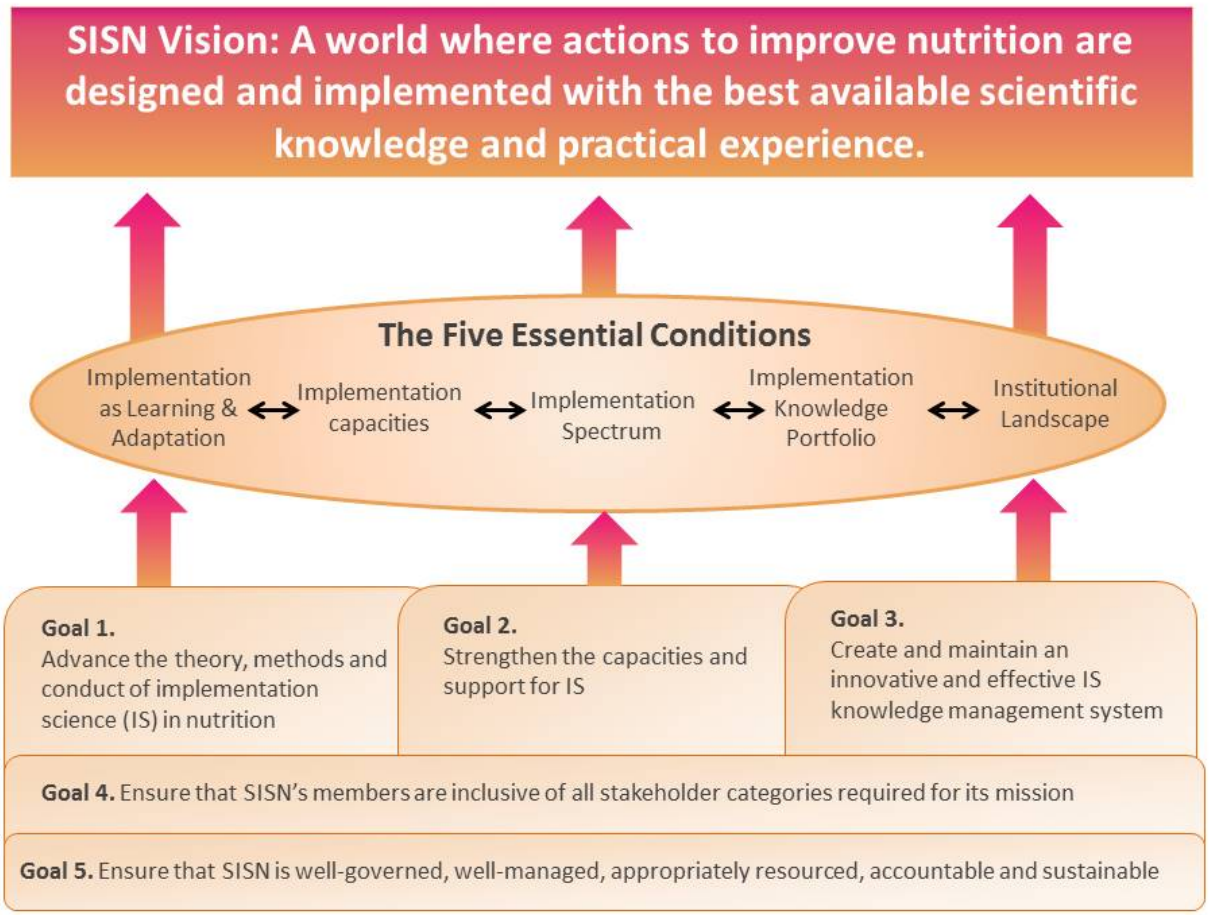
Box 2. SISN Values and Guiding Principles
1. Providing and mobilizing collective leadership and support for advancing the science and practice of implementation by serving functions that individual researchers and practitioners cannot fulfill on their own.
2. Ensuring that effective and *context-appropriate* nutrition-relevant interventions, programs and policies are available, accessible and appropriately implemented, scaled, sustained, mainstreamed and/or terminated.
3. Recognizing that *context-appropriateness* includes scientific, social, cultural, equity, economic, political, legal, ethical and sustainability considerations. Scientific evidence is one consideration among many.
4. Recognizing, valuing and respecting the important and distinctive forms of knowledge that various stakeholders and communities can bring to bear and the need for effective and transparent mechanisms for sharing, integrating and co-producing that knowledge in the formulation of research agendas and implementation strategies.
5. Fostering mutual understanding and respectful partnerships for the design, conduct and utilization of diverse forms of implementation research.
6. Recognizing, valuing and respecting the important and distinctive roles that all stakeholders play in improving nutrition, including the affected communities.
7. Learning from and contributing to the broader body of knowledge concerning implementation and implementation science in other disciplines and sectors.
8. Building and maintaining a scientific and professional society that upholds the values of integrity, neutrality, inclusivity, transparency, accountability, continuous learning and the need to balance rigor and relevance in implementation-oriented research.

6. Goals and Strategies

The Society has five key goals (Box 3) which are built on the foundation of the five essential conditions (Box 1, p.3), combined with the values and guiding principles (Box 2, p.7) and the activities needed to operationalize them (Figure 2). These foundation aspects simultaneously shape the goals themselves and inform how those goals should be operationalized, as described below. The consolidated set of goals and strategies with 2016 priorities is provided in Annex 3.

Box 3. SISN Goals
1. Advance the theory, methods, conduct and capacity for implementation science in nutrition
2. Strengthen the capacities and support for implementation science
3. Create and maintain an innovative and effective IS knowledge management system
4. SISN's members are inclusive of all stakeholder categories required for its mission
5. Ensure that SISN is well-governed, well-managed, appropriately resourced, accountable and sustainable

Figure 2. SISN Goals, Essential Conditions and Vision



6.1. Goal 1: Advance the theory, methods, conduct and capacity for implementation science in nutrition

This goal directly addresses the "Implementation Capacities" (Essential Condition 4) and it responds to the need that IR must be capable to addressing all the decisions and processes in the "Implementation Spectrum" (Essential Condition 2) and broaden the forms of knowledge in the "Implementation Knowledge Portfolio" (Essential Condition 3).

It also responds to the fourth guiding principle of "recognizing, valuing and respecting the important and distinctive forms of knowledge that various stakeholders and communities can bring to bear".

This goal recognizes that the theory, methods and conduct of IR differs in many ways from the historical mainstream of nutrition research and, as such, there is a need to articulate, develop, promote and strengthen capacity and resources for this approach. This is a long-term undertaking but many of the strategies and activities can be initiated quickly, because of the high demand from various organizations at global and national levels (e.g., activities 2, 3, 5, 6 and 9 are in high demand in SUN countries).

Goal 1. Strategies and Activities

Maintain an evolving portfolio of committees, working groups and activities to:

1. Articulate and promote the distinctive theory & methods of IS for nutrition
2. Develop a Reference Framework for implementation and IR
3. Facilitate setting research agendas at global, regional and national levels
4. Advocate for increased funding for IR
5. Strengthen methods for implementation research
6. Develop guidance for analysis and use of experience-based knowledge
7. Participate in, organize and/or shape conferences
8. Identify and promote appropriate publication outlets for IR
9. Promote and/or collaborate on IS in other professional and scientific societies and organizations
    - Catalyze national/regional sister societies for IS in Nutrition
    - Catalyze a focus on IS in existing nutrition societies
    - Collaborate with IS organizations in other disciplines and sectors
10. Create and/or endorse awards for individuals, organizations and countries.

6.2. Goal 2: Strengthen the capacities and support for implementation science

The need to address the full range of decisions and processes in the Implementation Spectrum and to create a diverse "Implementation Knowledge Portfolio" has implications for the research community, in terms of methods, practices and capacities. This is not only a matter of strengthening and disseminating technical research methods and providing training. This is because the deeply institutionalized agendas, financing, incentives and methods for most nutrition research were created to support largely mechanistic, causality and efficacy research with potentially broad applicability. These have been vital for creating the knowledge and momentum we see today but they are not sufficiently broad and diverse to meet the needs of implementation moving forward. Moreover, the long-time horizons for producing results, the institutional separation and limited communication between researchers and implementers and the specialized languages and cultures of these two communities have contributed to the mismatch between the research

produced versus the research needed. These factors also have contributed to the tension that sometimes exists when researchers and implementers have tried to undertake research in real-world settings. **Thus, the second goal is to develop, adapt, reform and/or strengthen research methods, practices and capacities to align with the distinctive needs of implementation and mobilize the human, organizational and financial resources for this.** This includes IR capacities at individual, institutional, national, sub-national and/or sectoral levels.

Goal 2. Strategies and Activities
1. Identify opportunities to make the emerging products of Goal 1 (concerning the theory, methods and conduct of implementation science) available to all available and accessible to all individuals and organizations in the implementation and implementation research space 2. Initiate activities in collaboration with the SUN secretariat to take stock of existing IR at country level and identify mechanisms for support 3. Explore the potential for a country-centered IR grants program with built-in objectives and opportunities for capacity strengthening 4. Identify opportunities for SISN to collaborate with donor-funded initiatives, to strengthen IR quality and capacities within those initiatives

6.3. Goal 3: Create and maintain an innovative and effective IS knowledge management system

The findings from formal IR projects and field experience, as they relate to specific implementation tasks or challenges, is often difficult to access. In part this is because this field of inquiry is only now emerging. But in larger part it is because such information is variously located in journals, the grey literature and the reports and websites of research institutes, governments, donors, NGOs and consultants. The "Implementation Knowledge Portfolio" is potentially vast and diverse, but currently is not organized and not readily accessible. This has several adverse consequences, it is a barrier to practitioners in donor, NGO and government agencies because they have neither the time nor the patience to search for information that may help with their implementation decisions and challenges, it is a barrier to researchers and future IR funders who may wish to identify and address gaps in knowledge and it makes it difficult or impossible to adequately synthesize and disseminate knowledge on various topics.

None of the present global organizations presently have sufficient incentive to address this gap and, as such, it is a public good that SISN can catalyze and support. As indicated in the strategies, this could be done by establishing some capacity of its own and by partnering with appropriate action or normative agencies for some of the tasks.

Goal 3. Strategies and Activities
Maintain an evolving portfolio of committees, working groups and activities to: 1. Maintain an up-to-date, accessible, relevant website 2. Create linkage to a database of member expertise (e.g., LinkedIn) 3. Create and maintain registries, archives and databases (best if maintained by an action or normative agency) 4. Deploy digital dissemination strategies and platforms 5. Disseminate knowledge products (briefs, commentaries, FAQs, etc.), developed by SISN work groups, members or other organizations.

6.4. Goal 4: SISN's members are inclusive of all stakeholder categories required for its mission

This goal responds to the first essential condition of viewing implementation as an iterative, continuous, knowledge-intensive process of learning and adaptation. It also is shaped by our guiding principle regarding the important roles of all stakeholders, the need to integrate their distinctive forms of knowledge and the need to foster mutual understanding and respectful partnerships.

The intended membership of SISN is diverse. It includes:

a) Individuals from universities and research centers in potentially all regions and countries (faculty, researchers and students engaged in the research, teaching and training related to nutrition implementation)
b) National and international nutrition consultants who often are engaged in contextual IR and data activities
c) International NGOs from headquarters and field offices
d) National NGOs (small, medium and large, from national and sub-national levels)
e) UN Agencies from headquarters, regional and country levels
f) Bilateral and multilateral donors at headquarters and field level
g) Private foundations
h) International initiatives such as SUN and REACH
i) Businesses, including those in the food system and other sectors
j) Government agencies, including nutrition-responsible managers, coordinators and policy makers from national level (and sub-national in some countries) as well as regional and continental bodies.

This list suggests that SISN's membership may easily number in the hundreds and is likely to include as many, or more, practitioners as researchers.

Goal 4. Strategies and Activities
Maintain an evolving portfolio of committees, working groups and activities to: 1. Deploy continuous recruitment, outreach and retention strategies 2. Maintain appropriate member fees 3. Ensure that SISN holds value for all its member and stakeholder categories 4. Provide travel scholarships for meetings.

6.5. Goal 5: Ensure that SISN is well-governed, well-managed, appropriately resourced, accountable and sustainable

This goal responds directly to the eight guiding principle and is an absolute requirement in order for all other goals to be achieved. It applies to the SISN secretariat, the composition and performance of the Board, and the number, composition and Terms of Reference (ToRs) for the various committees, sub-committees and working groups needed to guide and implement the strategic plan.

Goal 5. Strategies and Activities
Maintain an evolving portfolio of committees, working groups and activities to: 1. Ensure the size, composition and physical space to support all the goals, strategies and activities of SISN (Secretariat) 2. Ensure finances to support SISN secretariat and strategic plan 3. Internal monitoring of the process and progress of the secretariat and the Board 4. Annual accounting and reporting (legal) 5. Annual assembly and reporting to members 6. Create high-level advisory board (with senior officials from key stakeholder organizations) 7. Internally commissioned external evaluation every 3-5 years.

7. SISN's Strategic Niche

SISN's vision, goals and essential conditions demand that it operates at the interface of knowledge and action. In turn, this requires that SISN include members from the "knowledge world" as well as the "action world" and position itself to interact with both worlds from within, and beyond, its membership (Box 4). SISN cannot be a silo of researchers that focuses only on knowledge generation - it must be an integral part of the "nutrition ecosystem" at global and national levels.

As with all ecosystems, SISN's niche must be defined by its relationships with other actors and organizations because the resources and mandates for advocacy, commitment building, planning, financing, implementation and research all are located within these. As such, SISN's niche is to selectively and strategically support their efforts, guided by the five essential conditions (Box 1, p.3), organizing its work in relation to the five goals (Figure 2, p.8) and using the broad methods identified in its mission statement: *To convene, advocate, disseminate and promote dialogue among scientists, policy leaders, government officials, funders and practitioners to advance the science and practice of nutrition implementation world-wide.*

At an operational level SISN relies upon an active Board, a full-time secretariat and an evolving portfolio of committees, working groups, ambassadors and its diverse membership to implement bi-annual work plans and respond to emergent needs and opportunities. SISN will require an operational budget to support its work and will seek these funds in relation to its bi-annual work plans.

Box 4. The "Knowledge World" and the "Action World"

Although this document frequently refers to "researchers," the knowledge world also includes people (in various positions and organizations) who act formally or informally as knowledge brokers, purveyors, thought leaders, etc., who can play crucial roles in supporting the side of SISN's vision related to the access and utilization of knowledge. It also includes staff in monitoring and evaluation (M&E) positions, statistical offices and planning departments who can play vital roles in the "CONTEXTUAL IR" dimension of SISN. These are important distinctions in order to prevent any misperception that SISN is entirely or primarily a society of researchers, or academics, focused only on undertaking and publishing new scientific studies in the conventional way. Similarly, the "action world" includes not only frontline implementers and managers who are at the core of implementation, but also a wide range of actors from government, NGO, UN, donor, foundations and the private sector who play important roles in initiating, designing, financing, implementing and evaluating policies, programs, interventions, research and capacity-strengthening initiatives.

8. Priorities and Expected Achievements for 2016-20

As a new Society there is a vast array of activities to be undertaken for SISN to deliver on its goals, hence activities have been prioritized: some activities have already started; others will commence further into the first term (2016-17); and some are scheduled to be initiated in the second term (2018-20). The qualification to this is that there needs to be some degree of flexibility for priorities and strategies to be reassessed and reprioritized in response to any new opportunities (and challenges) that may emerge and as the Board gains experience. Annex 3 details all the goals in summary form with first term priorities indicated. Most activities for the first term have already begun or have been assigned, with Board members being designated responsibility for a portfolio of activities.

9. Tracking Progress

Each of the five SISN goals currently includes a variety of sub-strategies or activities as indicated in the respective sections of this plan. As indicated above these have been prioritized and may be subject to modification. The bi-annual work plan will specify how each activity will be implemented and will identify quarterly or semi-annual milestones and indicators for tracking purposes. These indicators will be a mix of inputs, activities, outputs and outcomes, as appropriate. The progress based on these indicators will be discussed as part of the monthly or bi-monthly board meetings and with the external advisory board in its annual meeting.

10. Accountability

In light of its membership and mission, SISN's accountability relationships are more complex than many non-profit organizations that are focused on advocacy or service delivery, and also distinct from a research-only organization. The accountability framework (Box 5) details who is accountable for what, to whom and through which mechanisms.[2] SISN's organizational structure is shown in Figure 3.

[2] Adapted from Ebrahim (2003) in Nonprofit Management and Leadership (14):2, 191-212.

Box 5. SISN Accountability Framework			
Who	**For What**	**To Whom**	**Mechanisms**
SISN Board	Finances, Governance Performance, Mission, Conflict of Interest, Conflict of Commitment	Self-Regulation	Board meetings Work plan monitoring
		Members	Exit, voice, vote
		Funders	Contracts, Future funding
		Advisory Board	Annual meeting Annual Report External evaluation
		Implementers/ Users	via Advisory Board Annual Report
		Communities	via Advisory Board
		IRS	Legal review and audit
Board Members	Performance, Conduct, Conflict of Interest, Conflict of Commitment	Board	Board meetings Work plan monitoring COI disclosure
Secretariat, Committees, Sub-Committees, Working Groups, Ambassadors	Performance, Conduct, Conflict of Interest, Conflict of Commitment	Board	Terms of Reference Reporting Deliverables

Figure 3. SISN Organizational Structure

Annex 1. The Lazio Declaration for Implementation Science in Nutrition

165 million children suffer from chronic malnutrition, which causes 3.1 million child deaths annually or 45% of all child deaths.[1] Malnutrition is the single largest cause of death because it potentiates fatal infectious diseases. And if children survive, malnourished children have higher odds of poor health and development outcomes[1]. We know how to prevent almost all of these deaths and improve nutrition, health and child development with current interventions, but poor implementation and low quality of service delivery remain major bottlenecks for achieving scale and impacts.[2]

In response to these challenges and the threats to food security caused by climate change, conflicts and economic crises, there is renewed interest and investments in nutrition, exemplified by the Scaling Up Nutrition (SUN) movement, the Nutrition for Growth Summit, the Sustainable Development Goals, the Second International Conference in Nutrition, and the Power of Nutrition Fund. As commitments build, and countries engage more deeply with questions about how to deliver nutrition programs at scale, the two critical challenges are: achieving high coverage and delivering high impact from interventions already shown to have health and human capital benefits.[3]

In 1991, Alan Berg blamed the general failure in reducing malnutrition on the lack of focus on *how* nutrition interventions and programs are delivered.[4] More than 20 years later, we still lack sufficient knowledge about how to translate knowledge into effective programming, including how to overcome system barriers. Fulfilling our commitment to health and human development requires an ambitious implementation science agenda for informing the scaling up of nutrition actions; generating evidence on the cost-effectiveness and equity of delivery strategies; and improving our understanding of the management processes and frontline capacities that increase the quality of nutrition service delivery.[3] This requires developing innovative research modalities, including more effective ways to link research to implementation. Importantly, we need significant increases in funding for implementation research because currently nutrition comprises less than 0.5% of total overseas development assistance (ODA), and estimates suggest that less than 3% of that funding is allocated to implementation research.[5]

In February 2015, at Castel Gandolfo, Italy, the Society for Implementation Science in Nutrition was established (www.implementnutrition.org). This Society values scientific and practitioner knowledge, bestows professionalism through affiliation and continuing education, and actively creates partnerships, acknowledging that nutrition is implemented through integrated multi-sectoral (and hence complex) programs, policies and strategies. There is a need for: (i) scientists in academic centers to fully engage in implementation research in the challenging context of real-world policies and programs, (ii) action agencies, program planners and funders to invest, support and partner in such research, and (iii) high quality and influential peer-reviewed journals, such as the Journal of Nutrition, to publish this work.[2] Only through a collective effort involving financing, evidence-generation, training, dissemination and policy engagement can we ensure that nutrition actions are appropriately designed and implemented at scale to reduce malnutrition in all its forms.

Jean-Pierre Habicht, member of the writing committee, on behalf of the Founding Members of the Society for Implementation Science in Nutrition.

Contributors

Jean-Pierre Habicht oversaw the writing of the letter.
The Founding Members conceptualized, drafted, gave final approval and agreed to be accountable for the work. The writing committee (names with asterisk*) wrote the first drafts of the letter and incorporated improvements made by the other Founding Members. Eva Monterrosa* managed the writing committee and is the corresponding author.

The Founding Members

Mandana Arabi, Jean Baker, Gilles Bergeron, Martin Bloem, Howarth Bouis, Namukolo Covic*, Omar Dary, Luz Maria De- Regil, Rafael Flores-Ayala, Patrizia Fracassi, Stefan Germann, Stuart Gillespie, Jean-Pierre Habicht, Susan Horton, Jessica Johnston, Joyce Kinabo, Rolf Klemm, Klaus Kraemer, Karin Lapping*, Anna Lartey, Purnima Menon*, Eva Monterrosa, Robert Mwadime, Banda Ndiaye, Lynnette Neufeld, David Pelletier*, Gretel Pelto*, Juan Pablo Peña Rosas, David Peters, Ellen Piwoz*, Juan A. Rivera, Marie Ruel*, Werner Schultink, Meera Shekar, Rebecca Stoltzfus, Emorn Udomkesmalee, Cesar Victora, Patrick Webb, Stanley Zlotkin.

We declare that we have no conflicts of interest.

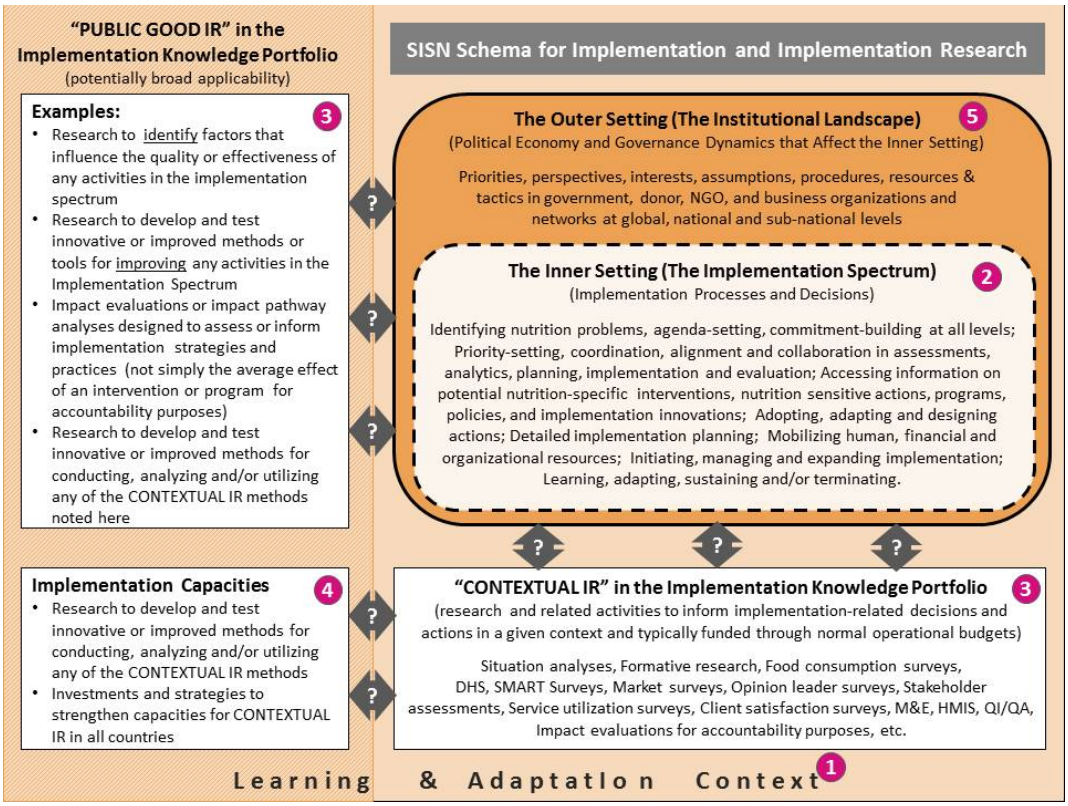
1. Black RE, Victora CG, Walker SP, and the Maternal and Child Nutrition Study Group. Maternal and child undernutrition and overweight in low-income and middle-income countries. Lancet 2013; 382: 427–451.
2. Shekar, M. on behalf of 17 other signatories. Delivery sciences in nutrition. Letter to the Editor. Lancet 2008; 371: 1751
3. Menon P, Covic NM, Harrigan PB, et al. Strengthening implementation and utilization of nutrition interventions through research: a framework and research agenda. Ann NY Acad Sci 2014; 1332: 39–59.
4. Berg A. Sliding towards malpractice: time to reconsider and redeploy. Annu Rev Nutr 1993; 13: 1–16.
5. International Food Policy Research Institute. Global Nutrition Report 2014: Actions and Accountability to Accelerate the World's Progress on Nutrition. Washington, DC: IFPRI, 2014.

Annex 2. Notes to the General Schema for the Roles of Implementation Research

The schema shown in Figure 1 depicts the relationships between the two categories of implementation research (PUBLIC GOODS and CONTEXTUAL) that make up the knowledge portfolio and the two sets of factors (the Institutional Landscape and Implementation Spectrum) that affect the quality and impact of implementation.[3] The figure brings together some foundational elements of this strategic plan in a single image and provides the rationale for the broad perspective taken in this plan. It has several major implications:

a) It reveals the fundamental importance of "implementation capacity" (broadly construed, at individual, organizational and system levels) as a major driver of implementation quality
b) It reveals the need for implementation research agendas to be responsive to the many factors in the outer and inner settings than can compromise the quality of implementation
c) The question marks in each of the arrows remind us that the "translation step" (from knowledge to practice) is neither straightforward nor uni-directional. Indeed, a great deal of implementation-relevant knowledge (and experience) already exists but is inaccessible, under-utilized or mis-utilized. As such, there is a need for strategies to foster and facilitate effective utilization of existing knowledge and experience (as well as new empirical knowledge from both categories of IR) and this is an enormous implementation challenge in its own right.

The figure also makes an important distinction between two forms of Implementation Research (IR): CONTEXTUAL IR and PUBLIC GOODS IR. The CONTEXTUAL IR box identifies research and data-related activities that already are present in most countries and/or could be deployed or strengthened to improve decisions and implementation processes. Given the importance of context, this is probably the most impactful category of IR. The PUBLIC GOODS IR box identifies some of the broad categories of research that could potentially have broad applicability for strengthening the implementation processes in many settings or strengthening the quality, effectiveness, efficiency or capacity for the CONTEXTUAL IR.



[3] The language of inner and outer setting is taken from a meta-framework that is a consolidation of themes from twenty frameworks published previously (Damschroeder et al., Implementation Science 4:50, 2009). Figure 1 identifies the wide range of decisions and processes that are implicated in implementation, which is useful for our present purposes. In contrast, and in a complementary fashion, the Damschroeder framework itself identifies a large number of individual and organizational factors that affect the quality of decisions and processes.

Annex 3. Summary of SISN Goals and Strategies (Priorities for 2016-17 shaded)

Goals	Strategies and Activities
	Maintain an evolving portfolio of committees. working groups and activities to:
1. Advance the theory, methods and conduct of implementation science in nutrition	1. Articulate and promote the distinctive theory & methods of IS for nutrition 2. Develop a Reference Framework for Implementation and Implementation Research 3. Facilitate setting research agendas at global, regional and national levels 4. Advocate for increased funding for implementation research 5. Strengthen methods for implementation research 6. Develop guidance for analysis and use of experience-based knowledge 7. Participate in, organize and/or shape conferences
	8. Identify and promote appropriate publication outlets for IR 9. Promote and/or collaborate on IS in other professional and scientific societies and organizations -Catalyze national/regional sister societies for IS in Nutrition -Catalyze a focus on IS in existing nutrition societies -Collaborate with IS organizations in other disciplines and sectors 10. Create and/or endorse awards for individuals, organizations and countries.
2. Strengthen the capacities and support for implementation science	1. Identify opportunities to make the emerging products of Goal 1 (concerning the theory, methods and conduct of implementation science) available to all available and accessible to all individuals and organizations in the implementation and implementation research space 2. Initiate activities in collaboration with the SUN secretariat to take stock of existing IR at country level and identify mechanisms for support 3. Explore the potential for a country-centered IR grants program with capacity strengthening opportunities 4. Identify opportunities for SISN to collaborate with donor-funded initiatives, to strengthen IR quality and capacities within those initiatives.
3. Create and maintain an innovative and effective IS knowledge management system	1. Maintain an up-to-date, accessible, relevant website 2. Create linkage to a database of member expertise (e.g., LinkedIn) 3. Create and maintain registries, archives and databases (best if maintained by an action or normative agency) 4. Deploy digital dissemination strategies and platforms 5. Disseminate knowledge products (briefs, commentaries, FAQs, etc.), developed by SISN work groups, members or other organizations.
4. SISN's members are inclusive of all stakeholder categories required for its mission	1. Deploy continuous recruitment, outreach and retention strategies 2. Maintain appropriate member fees 3. Ensure that SISN holds value for all its member and stakeholder categories.
	4. Provide travel scholarships for meetings.
5. Ensure that SISN is well-governed, well-managed, appropriately resourced, accountable and sustainable	1. Secretariat: ensure the size, composition and physical space to support all the goals, strategies and activities of SISN 2. Ensure finances to support SISN secretariat and strategic plan 3. Internal monitoring of the process and progress of the secretariat and the Board 4. Annual accounting and reporting (legal) 5. Annual assembly and reporting to members 6. Create high-level advisory board (with senior officials from key stakeholder organizations).
	7. Internally commissioned external evaluation every 3-5 years