







Systems Leadership for Sustainable Development: Strategies for Achieving Systemic Change

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Cover photos: World Economic Forum New Vision for Agriculture Initiative (upper left), Scaling Up Nutrition Movement (upper right), and Rich City Rides (below).

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Executive Summary

Addressing complex challenges through systems change

The 2030 Sustainable Development Agenda includes 17 inter-related Sustainable Development Goals (SDGs), each representing complex systems – such as climate, food, health, cities – with myriad stakeholders. Achieving progress on this agenda requires a departure from traditional top-down, hierarchical and linear approaches to implementing change. Instead it requires innovative and adaptive approaches that engage broad networks of diverse stakeholders to advance progress toward a shared vision for systemic change. This approach is called Systems Leadership.

Systems Leadership: A tool for our times

Systems Leadership is a set of skills and capacities that any individual or organization can use to catalyze, enable and support the process of systems-level change. It is comprised of three interconnected elements:



The Individual: The skills of **collaborative leadership** to enable learning, trust-building and empowered action among stakeholders who share a common goal



The Community: The tactics of **coalition building and advocacy** to develop alignment and mobilize action among stakeholders in the system, both within and between organizations



The System: An understanding of the **complex systems** shaping the challenge to be addressed

The Key Elements of Systems Leadership



The CLEAR Framework for Leading Systems Change

The CLEAR Framework for Leading Systems Change describes five key elements of the systems change process. These are not necessarily sequential – they may overlap or repeat in cycles throughout the course of an initiative.

1. Convene and Commit

Key stakeholders engage in moderated dialogue to address a complex issue of mutual concern. They define shared interests and goals, and commit to working together in new ways to create systemic change.

2. Look and Learn

Through system mapping, stakeholders jointly build a shared understanding of the components, actors, dynamics, and influences that create the system and its current outcomes, generating new insights and ideas.

3. Engage and Energize

Diverse stakeholders are engaged through continuous communication to build trust, commitment, innovation and collaboration. Inspiration, incentives and milestones help drive progress and maintain momentum.

4. Act with Accountability

Shared goals and principles set the direction of the initiative, while measurement frameworks help track progress.

Coordination and governance structures can be developed as initiatives mature.

5. Review and Revise

Stakeholders review progress regularly and adapt the initiative strategy accordingly. Adopting an agile, flexible, innovative and learning-centered approach allows for evolution and experimentation.



The Journey of System Leadership: The "Aha!" Moments

Participants in systems-change initiatives often describe the experience as a collective "journey" of discovery that evolves over time. Many stakeholders encounter similar experiences, which often crystallize in an "Aha! Moment" – a new insight that describes the dynamics at a given moment in the journey, such as those described below.

- 1 "No one is in control"

 No single entity has authority over the entire system.
- 2 "It's up to us"
 Stakeholders recognize a
 collective responsibility
 to address the challenge
 themselves.
- "Everything is Connected" Collective mapping and learning about the system generates new insights.

"We'll find a way"

- That's our North Star"

 The group agrees on a shared goal or vision to guide and align their efforts.
- 7 "I can make a difference"
 One person, organization
 or small group can have
 significant impact.
- 5 "To Go Far, Go Together" Engaging and securing buy-in from a wide array of stakeholders is essential.
- We need coordination"
 As the initiative grows,
 a coordinating team or
 Secretariat is often needed.
- "Wow! Change is happening" Demonstrating and celebrating progress helps maintain momentum.

Challenges and setbacks can spur

innovation and collaboration.

"We're in it together, for the long haul"

Reaffirming commitment and evolving to meet changing needs enables long-term success.

Mainstreaming Systems Leadership

The Systems Leadership approach is still in an early stage of development. Greater alignment and collaboration is needed among relevant experts and practitioners to enable broader access to and adoption of the approach. Additional investments and partners are needed to research and evaluate existing initiatives; disseminate insights on good practices; expand capacity-building training and tools; and strengthen leadership support.

While Systems Leadership is not yet widely practiced, it offers a potentially valuable tool for addressing the complexity, dynamism and scale of the multi-dimensional challenges underlying the SDGs. As such, it shows great promise as a tool for advancing the 2030 Agenda for Sustainable Development.

Preface: A Tool for our Times

The complex and inter-connected issues at the heart of the Sustainable Development Goals (SDGs) require innovative approaches for mobilizing widespread and meaningful action. One of these approaches is described as Systems Leadership.

The Systems Leadership approach is well-suited to complex challenges that require collective action, where no single entity is in control. It involves building and mobilizing alliances of diverse stakeholders around a shared vision for systemic change, empowering widespread collaboration, innovation and action; and enabling mutual accountability for progress to shift systems towards sustainability. Systems Leaders, which can include both individuals and institutions, serve as catalysts and enablers of this process – a role requiring optimism, flexibility and endurance, along with the ability to understand and empower stakeholders with very different viewpoints and incentives.

While the concept of Systems Leadership makes intuitive sense to many stakeholders, it is not yet widely embraced and practiced. Mainstreaming its application will require a broader and more coordinated effort to develop research, share knowledge and build capacity. Platforms for exchanging knowledge and experiences among Systems Leadership practitioners are needed to share and accelerate learning.

This paper contributes toward that broader goal by offering concepts, examples and tools of Systems Leadership to professionals from multiple sectors who are working to advance sustainable development. It seeks to link and synthesize existing experiences in diverse sectors and geographies. It is informed by the practical experiences of the authors in building a variety of multi-stakeholder coalitions at global, regional and national level across varied sectors including health, nutrition, agriculture, environment and energy. It also draws on interviews, case examples and literature reviews, suggesting ways in which Systems Leadership approaches can usefully be applied to complex challenges in sustainable development. The paper builds upon previous work on the topic, drawing extensively from existing expertise and research to provide additional insights and resources for practitioners and leaders.

We are indebted to the experts and leaders who contributed their time and perspectives to shape the perspectives shared in this paper, including John Atkinson, Banny Banerjee, Jennifer Dunne, Hal Hamilton, John Kania, Ian Randall, Darcy Riddell, Peter Senge, Linda Booth Sweeney, Dominic Waughray, and Darcy Winslow. These leading experts and practitioners are among a growing number of advisors, initiatives and programs that are involved in developing and applying Systems Leadership and systems change strategies. This paper does not provide a comprehensive mapping of the field, instead seeking to present highlights and syntheses. We apologize for any omissions and look forward to continued dialogue and collaboration with those working to develop and apply systems-oriented approaches.

The practice of Systems Leadership is constantly evolving. Many of its core elements are ready for use by individuals, institutions and communities. As a growing number of individuals and institutions apply and further develop this approach, they will generate new insights and capacities to advance the systems-level changes that are essential for a sustainable future.

We thank the Harvard Kennedy School's Corporate Responsibility Initiative for supporting and publishing this paper, as part of its broader work to advance constructive strategies for multi-stakeholder contributions to sustainable development.

Lisa Dreier | David Nabarro | Jane Nelson

■ Systems Leadership: An emerging approach for tackling complex challenges

What is Systems Leadership?

Systems Leadership is a set of skills and capacities that any individual or organization can use to catalyze, enable and support the process of systems-level change. To illustrate how it can work, consider two very different examples.

In 2015, the landmark Paris Agreement committed 195 countries to a framework for action on climate change - including specific targets for reducing greenhouse gas emissions, support for climate mitigation and adaptation, and a monitoring and reporting framework. Advocacy and negotiations leading up to the agreement engaged thousands of organizations including governments, industry, civil society, international organizations, academia and research, faith organizations and indigenous communities. A number of individual leaders within these stakeholder networks played crucial roles in building alignment, mobilizing action and securing commitment. The most visible was Christiana Figueres, who led this historic process as Executive Secretary of the UN Framework on Climate Change (UNFCC), establishing what many characterized as a new model of collaborative diplomacy – engaging a broad diversity of stakeholders in jointly developing solutions and commitments.

Across the world in the city of Richmond, California, a grassroots organization called Rich City Rides set out to address the inter-locking challenges of poverty, chronic disease and environmental degradation which disproportionately affect the city's communities of color. They conceived a vision for developing Richmond as a bicyclefriendly community, using cycling to improve health, provide sustainable transportation, generate job opportunities, and strengthen the community's social fabric. They established a bike shop, working with local youth to reclaim and repair over 1,000 bicycles, building job skills and economic assets as well as sustainable, low-cost transport. They organized bicycle outings, camping trips and park cleanups to engage families in healthy exercise and nature appreciation. In the process the founder of Rich City Rides, Najari Smith, engaged local community organizations, city and regional government, philanthropists and industry to help support and implement these innovative programs.

What do Christiana Figueres and Najari Smith have in common? On the face of it they are very different – one a diplomat from Latin America; the other a community organizer from California. One works at the highest levels of global leadership, the other at the most local community level. One is the daughter of a president who studied abroad and earned a graduate degree; the other grew up in Brooklyn, graduating from a public high school and college.

But a closer look reveals important similarities. Both set out to address a complex problem which involved multiple dimensions and required multi-faceted solutions. Both worked with diverse stakeholders to develop an ambitious and holistic vision for change and leveraged the power of networks to mobilize action and commitment toward that goal. Both took a collaborative approach, engaging and empowering relevant stakeholders rather than trying to control or direct them.

These similarities illustrate the concept of Systems Leadership, a relatively new term for the leadership skills, tactics and qualities that can be effective in addressing complex, systemic challenges. Systems Leadership draws upon familiar skills – such as subject expertise, strategy development, program management, coalition-building, and collaboration – many of which have been applied by advocacy and community development leaders for decades. However Systems Leadership combines these skills in a new way with the explicit goal of creating change on complex, systemic issues. It is the combination of knowledge, skills and mindset, applied to create systemic transformation, that defines a Systems Leader.

Why is this important? Because the challenges facing our local and global communities are increasingly complex and interconnected, and they demand this kind of approach. Whether it's the intersection of poverty, health and environment in urban America, or the global challenge of climate change that affects everything from food to health to urban planning, today's problems are complex and require coordination among many stakeholders. No single organization can solve these complex challenges – instead, diverse stakeholders must come together to develop a shared approach. That requires coordination as well as vision, trust-building and innovation. It requires Systems Leadership.

The need for Systems Leadership to address complex global challenges

The Systems Leadership approach is especially relevant to the complex global challenges facing us today – such as poverty, hunger, human health, environmental degradation and violent conflict. The international community is seeking new approaches to these types of challenges as it works to achieve the Sustainable Development Goals (SDGs). Adopted in 2015 by 193 countries as part of the historic 2030 Agenda for Sustainable Development, the 17 SDGs define ambitious targets to improve global sustainability, health, economic development and equality. The architects of the SDGs recognized that the goals were closely inter-linked and called for holistic, synergistic and people-centered approaches – engaging all stakeholders – to achieve them.

Progress on such global challenges requires a collective embrace of complexity. It requires the commitment of individual people and organizations joining together to take collective action through large networks and coalitions, in order to create impact and systemic change at scale. It requires new and innovative approaches that engage broad networks of diverse stakeholders, harnessing their complementary capacities to advance progress toward a shared goal. It requires strategies that are emergent, adaptive and flexible, because complex systems are always changing.

This necessitates a departure from traditional, hierarchical approaches to implementing change. More top-down forms of leadership are based on authority and control, which works well when the scope is limited to one organization's sphere of influence. For example, a company can change its product line or supply chain to reduce its carbon footprint with a simple order from the CEO. However the top-down approach will not enable that company to solve global climate change. To tackle that systemic challenge, the company must work with many other stakeholders – such as policymakers, technology providers, civil society and research institutions – to mobilize a broader impact with a goal of achieving system-wide change. Engaging in such collaboration and alliance-building is often a new and unfamiliar approach.

The past decade has seen an evolving series of strategies for advancing equitable and sustainable development. The earliest approaches focused on efforts by individual organizations – governments, nonprofits and international organizations ran their own programs, while companies developed socially beneficial business or philanthropic activities under the banners of **corporate social responsibility** (CSR), **creating shared value** and **inclusive business**. However many of these approaches were constrained in their systemic impact. Over time, many companies worked to deploy their business strategies in collaboration with nonprofits, governments, and other organizations through **public-private partnerships**, which strengthened social impact but were often difficult to scale.

To drive large-scale change, stakeholders are increasingly forming broad multi-stakeholder coalitions, involving dozens or hundreds of organizations. FSG described this as the **collective impact**² approach and it remains highly effective in building large-scale alliances to tackle specific challenges. This approach draws heavily on the coalition-building and advocacy approaches developed over many decades by civil society and social movements. Building on this rich history, the **Systems Leadership** approach emerged as a way to create transformational systemic change, by mobilizing and empowering networks of diverse stakeholders to achieve a common goal through widespread action and innovation.

Systems Leadership is designed to support the collective journey of systems change. It helps foster the innovation, insight, trust and collaboration that aids the transformation of individual systems components and systems-wide dynamics. It offers techniques and tools that catalyze, enable and accelerate multi-level, long-term transformation of systems. It enables stakeholders to tackle issues whose complexity and scope has defied resolution through other means. It can build the adaptive capacity of a system, enabling it to better respond to future challenges in addition to improving outcomes for today. As a result, it can be a valuable tool to support efforts to realize the 2030 Agenda for Sustainable Development.

II The Emergence of the Systems Leadership Concept

The term "Systems Leadership" surfaced during the past decade and has attracted increasing interest as diverse stakeholders seek new approaches to address complex, systemic challenges. However the concept of Systems Leadership has deeper roots, drawing from decades of academic research and practitioner experience in the interlinked fields of systems dynamics, organizational behavior, and leadership for collective impact. Numerous individuals and institutions have played leadership roles in these different fields of endeavor. The following overview, while not exhaustive, presents select highlights.

From System Dynamics to Societal Challenges

Starting in the 1940s, biologist Ludwig von Bertalanffy developed systems theory3 to describe the nature and behavior of systems. Defining systems as a set of interacting, inter-related units, the theory stated that the behavior and outputs of the system are driven by the interaction of its components. In the ensuing years, complexity science emerged as an inter-disciplinary approach to understanding complex systems, drawing from systems theory, cybernetics, ecology and biology, sociology, mathematics, and other disciplines, led by the Santa Fe Institute and a broad network of academics. At MIT in the 1960s, pioneering computer engineer Jay Forrester founded the system dynamics approach⁴ to analyze, model and simulate the non-linear behavior of complex systems. This approach recognized that the interactions among elements of a system were just as important as the elements themselves in determining the behavior of a system. Initially applied to industrial systems, the approach evolved to analyze broader societal challenges such as urban development and environmental sustainability.

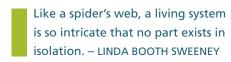
Fellow MIT scientists Donella Meadows, Dennis Meadows, Jorgen Randers, and William Behrens III worked with Forrester to create a global model projecting trends in population, consumption and environmental resources, publishing the influential *Limits to Growth* study in 1972 that helped catalyze the **global environmental movement**. Over the ensuing decades, Donella Meadows became a leading expert in describing the concept of complex, evolving, self-perpetuating systems – and the unforeseen consequences that can result from intervening to change them. Her book *Thinking in Systems*⁵ presents her key insights in concise and accessible form.

Drawing from work with the MIT System Dynamics group, management professor Peter Senge focused on the behavioral aspects of systems change to develop new approaches to **business and organizational leadership**. His bestselling book, *The Fifth Discipline*, described how companies can strengthen innovation, resilience and competitiveness by becoming "learning organizations" – embracing aspirational goals, reflective conversation and an understanding of complexity. In 2007 Senge called for a new type of **cross-sector**, **multi-stakeholder collaboration** for systemic change, uniting conceptual, relational and action-driven approaches, for which there was "no real precedent." Canadian academics Frances Westley and Brenda Zimmerman applied complexity theory to **social innovation**, emphasizing the systemic impact of changing the relationships between stakeholders.

Building on this work, MIT economist Otto Scharmer sought to understand the deeper drivers of effective system change, concluding that the quality of awareness among people in a system drives the quality of results produced by that system. Scharmer developed "Theory U," a framework for creating systems change through improved awareness, insight and co-creation.⁸ He founded the Presencing Institute to share the approach, catalyzing a virtual platform for practitioners called u.lab which has reached over 100,000 people in 185 countries to enable experience sharing and capacity building for "awareness-based systems change," encouraging awareness and reflection as essential precursors to action.

We cannot impose our will on a system. We can listen to what the system tells us, and discover how its properties and our values can work together to bring forth something much better than could ever be produced by our will alone.

– DONELLA MEADOWS



Embracing Living Systems

In parallel to the model-driven systems dynamics approach, another science-based approach to understanding systems was emerging. In 1978, American psychologist James Grier Miller published the Living Systems Theory which defined living systems as open, self-organizing systems that have characteristics of life and interact with their environment by exchanging information, energy and matter.9 The concept was popularized by Fritjof Capra, an Austrianborn, California-based physicist and systems theorist, in his landmark 1996 book The Web of Life: A New Scientific Understanding of Living Systems. 10 Drawing from a range of scientific theories, he articulated a new perspective on the inter-related, interdependent nature of biological, physical and social systems which stood in marked contrast to more traditional views of systems interaction. The idea that all aspects of life on earth are interdependent and inter-related carried profound implications.

Capra's work inspired a number of experts to apply the Living Systems concept to systems-change initiatives. Linda Booth Sweeney, who studied with Capra, developed the Systems Thinking Playbook, 11 providing exercises for teaching systems thinking to students, as well as other resources for applying the living systems concept to real-world situations. Margaret Wheatley and Myron Rogers founded the Berkana Institute, drawing from the Living Systems approach to support leaders and communities in becoming more adaptive, resilient and connected.¹² In the UK, John Atkinson applied the approach starting in 2005 at the UK Leadership Center for Local Government, evolving it in over 150 locales through the "Total Place" program. 13 He later co-founded the Phillips Kay Partnership with Myron Rogers to apply the Living Systems approach to institutional and multi-stakeholder transformation initiatives.

The Living Systems view provided an alternative to more traditional approaches to problem-solving, which tended to be rigid, reductionist and mechanistic and were ill-suited to the dynamics of complex systems. The messy reality of such systems requires an understanding of the context and inter-dependent elements of the system, and flexibility in exploring and responding to an ever-evolving landscape.¹⁴

Designing for Systems Transformation

In Silicon Valley, the concentration of technology companies and startups gave rise to new approaches to design to improve man-made systems in an industry setting. Stanford University's Product Design program, founded by John Arnold and Bob McKim, pioneered a multi-disciplinary approach to human-centered design. Design companies such as IDEO and practitioners such as Jane Fulton Suri further developed the approach, incorporating elements such as empathic observation to understand the needs embedded in a specific problem, developing and testing innovative solutions through experience prototyping. Described as **Design Thinking**, it encouraged creativity, experimentation and flexibility to make business products and services more human-centered and innovative.

Banny Banerjee, one of the initial architects of Design
Thinking at IDEO and later director of Stanford's Product
Design Program, broadened the approach to address
systems-level challenges. He founded Stanford ChangeLabs
as a teaching, training and advisory hub, developing a

System Acupuncture framework to design and deploy
synergistic interventions to enable systems transformation.
Students work to design transformation initiatives in
partnership with external organizations.

The Value Web, a nonprofit collective catalyzed in 2005, practices "Planet-centered design" to support system transformation. It uses system mapping and visualization, interactive dialogues, and big data to elicit breakthrough insights, transform stakeholder interactions, and catalyze and support communities of purpose.

The system is a dance being performed by many system actors, with complex interrelationships and emergent behavior. We must seek to understand underlying root causes and to frame issues as complex challenges, rather than mechanistic problems with "silver bullet" solutions. – BANNY BANERJEE



System Leadership catalyzes collective leadership in others... System Leaders focus on creating the conditions that can produce change and that can eventually cause change to be self-sustaining. – PETER SENGE, HAL HAMILTON & JOHN KANIA

The emergence of the Systems Leadership Concept

The concept of **Systems Leadership** (also called System Leadership) emerged in parallel on several continents, among experts and practitioners who developed strikingly similar ideas based on their experience with systems-change initiatives. The term "System Leadership" first surfaced in Australian and British research¹⁵, and was piloted by the UK's Leadership Centre¹⁶. The concept gained significant visibility and traction in the US with the 2015 publication of an article in the Stanford Social Innovation Review titled "The Dawn of System Leadership." Jointly authored by Peter Senge of MIT, Hal Hamilton of the Sustainable Food Lab, and John Kania of FSG, the article linked together the systems, collective impact, and leadership arenas to describe in compelling terms how a new approach was needed to tackle the urgent, increasingly complex challenges facing the world today. They described the "System Leader" as someone who catalyzes collective leadership, action and innovation to address society's most complex challenges. Recognizing that the approach often required engaging with multiple systems at varied scales, others broadened the term to become "Systems Leadership."

The idea of Systems Leadership attracted interest within a global community searching for new approaches to achieve the complex, inter-connected 2030 Agenda for Sustainable **Development**. In 2016, spurred by a case study by the Harvard Kennedy School,¹⁷ the World Economic Forum defined Systems Leadership as a core pillar of its institutional strategy to serve as a leadership-level, multi-stakeholder platform to address key global challenges; and has worked to further define the approach¹⁸. In 2017, the United Nations' Chief Executives Board identified Capability for Systems Leadership as a necessary core strength for the United Nations system. Since then the UN Staff College has incorporated Systems Leadership into its curriculum, and individual agencies including UNDP have piloted systems-change approaches in select programs. Diverse organizations, from companies to social entrepreneurs and nonprofits, have begun experimenting with the Systems Leadership approach in their programs. However the concept remains in an early stage, with a need for further development, testing and dissemination.

Strengthening Capacity for Systems Leadership and Systems Change

The goal of "systems transformation" is increasingly popular in the social sector. Many organizations are integrating systems-change goals and strategies into their programs or messaging. Vigorous discussions have been catalyzed around the importance of taking an equity lens in systems-change initiatives – challenging practitioners to recognize inequitable power dynamics and seek to transform systemic injustice rather than disregarding or reinforcing it.¹⁹

However effective strategies for achieving systems change are still in an early stage of development. In response to growing interest, a number of organizations are working to build capacity, deepen knowledge and share experiences on leadership skills and tactics for advancing system change. Such capacity building is crucial, as many practitioners currently lack the competencies to lead systems change.²⁰

Training and Advisory Programs: Several organizations have developed tools, training and advisory programs for systems leaders. In the US these include the Academy for Systems Change, the Systems Leadership Institute, the MIT-affiliated Presencing Institute and associated U.lab, the Waters Center for Systems Thinking, the Omidyar Network in collaboration with the Acumen Fund, and Stanford ChangeLabs. In Europe these include the UK-based School for Systems Change, Phillips Kay Partnership, and the Swissbased social enterprise 4SD.

Several consultancies and nonprofits advise organizations on the approach, including the UK's Leadership Centre, which assigns experienced Systems Leadership coaches to support public-sector leaders through its "Local Vision" program²¹; Reos Partners, which combines scenarioplanning and alliance-building to facilitate systemic change; and Wasafiri Consulting, an international-development-focused firm which published a guide to systems-change approaches.²² SYSTEMIQ combines advisory support and facilitation with financial investment capacity to catalyze and enable systemic transformations to realize the SDGs. The US-based consultancy FSG, through its Collective Impact program and work with the philanthropy sector, has been a prominent thought leader on systems

Systems Leadership creates the container that allows solutions to emerge over time. In that way, the process becomes the solution. – JOHN KANIA

change²³. The Value Web provides custom design and facilitation to support systems-change initiatives. CoCreative facilitates collaborative innovation, strategy building and leadership training for systems-change initiatives. Systems Sanctuary builds capacity among System Leaders through peer-to-peer learning.

Research and teaching: A growing number of academic institutions are researching and teaching Systems Leadership or related systems-change skillsets. MIT remains a hub of expertise and capacity-building through the Society for Organizational Learning, the Presencing Institute, and other initiatives. The Harvard Kennedy School's Corporate Responsibility Initiative has developed two case studies of World Economic Forum initiatives that apply the Systems Leadership approach.²⁴ Stanford's ChangeLabs is a hub for applied research and learning, training students and professionals through projects conducted in partnership with international organizations. Linda Booth Sweeney has developed curriculum and resources for teaching systems thinking to children at the K-12 levels.²⁵ Singapore Management University offers a graduate-level program in Tri-Sector Collaboration, founded by Ann Florini.

Recognizing the diversity and early stage of systems-focused educational programs, some academic institutions are working to convene and connect educators. In 2018, the Yale School of Management convened a group of academics and systems leaders working in formal educational institutions. Also in 2018, the McConnell Foundation and others convened Canadian systems-change educators to strengthen practitioners' capacity, building on earlier work through the Foundation-supported Social Innovation Generation (SIG) initiative, which focused on supporting systemic change by enabling social innovations.

Strengthening philanthropic support: Donors are exploring avenues for strengthening philanthropic support for systems transformation approaches, both in their own strategies and among their grantees. The Omidyar Network developed an internal strategy and a public workbook²⁷ for taking a systems approach. The Garfield Foundation's Collaborative Networks Program supports alliances and networks working on issues related to environmental sustainability through "systems-informed collaboration." FSG has undertaken extensive

research²⁸ on charitable foundations' approach to systems change. Several collaborative initiatives are underway in the philanthropic sector. *Co-Impact* was launched in 2017 with a \$500 million commitment from a group of donors including the Rockefeller Foundation, Richard Chandler, Bill and Melinda Gates, Jeff Skoll, and Rohini and Nandan Nilekani, and aims to support large-scale systems-change initiatives in health, education and economic opportunity. *Systems Understanding for Social Impact* (SUSI) is a learning collaborative engaging approximately 15 foundations, hosted by the Robert Wood Johnson foundation, the UK's Health Foundation and the McConnell Foundation. Its initial 3-year term (2018-2020) focuses on learning, exploring and piloting systems-change approaches as well as investing in broader development of the field.

Building the field of systems leadership: Despite this growing array of activity, many organizations still find it difficult to access the right knowledge and guidance to help them apply the Systems Leadership or systems-change approach. Experts and practitioners are often disconnected or siloed within specific sectors and geographies, and lack alignment around shared definitions or concepts. Recognizing the need for broader field-building for systems change and Systems Leadership, Darcy Riddell of the McConnell Foundation and Anna Birney of the School of Systems Change convened a group of Canadian and international stakeholders in a 2018 workshop on "Global Field-building for Systems Change." The group discussed key needs such as curating and connecting knowledge and networks; strengthening capacity through learning and support systems; engaging new voices; attracting funding; and stewarding field-building efforts.²⁹ The group now meets regularly to follow up on key priorities. More and broader efforts like this are needed, ideally linking together major experts and initiatives and providing an easily accessible platform to share and access knowledge about systems change and Systems Leadership.

The field is still emerging and maturing, and current practitioners are not functioning as an ecosystem. There is a growing demand among potential practitioners, but people cannot readily find what they need.

- ANNA BIRNEY and DARCY RIDDELL

III Defining Systems Leadership

The authors of "The Dawn of System Leadership" defined a Systems Leader as someone who "catalyzes collective leadership" in others.³⁰ How can that be achieved? While experts and practitioners have described the process in different ways (see Annex 1), there is a marked convergence around three elements: **understanding the system more deeply, engaging fellow stakeholders more meaningfully, and taking action in new ways.**Together, these interactions create new forms of collaboration and impact within the system, generating a wide-reaching multiplier effect.

Building on these common elements, we propose a definition of Systems Leadership which draws upon the work to date.

- Systems Leadership is a set of skills and capacities that any individual or organization can use to catalyze, enable and support the process of systems-level change. Systems Leadership combines a deep understanding of system dynamics, an inclusive approach to engaging and empowering all stakeholders, and the development of new forms of collaborative leadership.
- Systems Leaders are individuals or institutions that catalyze, enable and support systems-level change by mobilizing diverse actors to work together in new ways to achieve a shared goal. Both individuals and institutions can apply the Systems Leadership approach within a broad-based multi-stakeholder initiative.

Systems Leaders can be found operating at local, national, regional and global levels and in diverse sectors; exerting their influence and skills both within their own organization and across networks of organizations. In all settings they engage and build buy-in among diverse stakeholders to advance progress toward a shared vision or goal.

The key elements of Systems Leadership

Experience across diverse initiatives suggests that Systems Leaders need to develop and apply three key capabilities: their understanding of the system that shapes the challenge they seek to address; their ability to catalyze and support collective action among relevant stakeholders; and their ability to listen, learn and lead through coordination with and empowerment of others (described here as "collaborative leadership"). Systems Leadership can therefore be described as comprising of three elements:

- The Individual: The skills of collaborative leadership to enable learning, trust-building and empowered action among stakeholders who share a common goal
- The Community: The tactics of coalition building and advocacy to develop alignment and mobilize action among stakeholders in the system, both within and between organizations
- The System: An understanding of the complex systems shaping the challenge to be addressed



Figure 1 The Key Elements of Systems Leadership

These three elements of Systems Leadership represent three levels on which transformation and action must take place: that of the Individual, the Community and the System. The three elements can be applied sequentially: Individuals can mobilize networks, which in turn can enable systemic change. However they are highly synergistic and can also be enacted simultaneously. Quite often individuals, coalitions and systems-change strategies will evolve and develop new capacities at the same time as an initiative unfolds. In this way individuals, institutions, networks, and a broader system can all experience change and growth in the course of a systems-change initiative.

THE INDIVIDUAL: Through the practice of collaborative leadership, Systems Leaders both develop their own capabilities and enable individuals within the system to relate to each other and connect in ways that help them work differently. Systems-change initiatives often are driven by the sustained effort and commitment of individuals. One individual can shift the direction of an institution, catalyze the formation of a powerful network, or provide the crucial intervention to restore trust, focus or commitment when it is needed. Through connecting to a network, the individual can contribute to and influence the evolution of the system. The potential for individuals to influence systems carries an empowering and inspiring message: that anyone can make a difference, regardless of their level of authority or role in a system.

Individual Systems Leaders must exercise their influence with integrity, respect, and a learning mindset. A common theme in discussion of systems change is the importance of the mindset that individual leaders bring to their mission. Otto Scharmer's Theory U encourages leaders to "open the mind, heart and will" so that each challenges their own assumptions, truly hear others' perspectives, and explores new approaches. The Academy for Systemic Change cites "Development of Self" – including awareness, compassion, understanding and wisdom – as one of the key capacities for Awareness-Based Systemic Change. FSG's report, "The Water of System Change," highlights mindsets as the most influential – and least visible – determinant of systems behavior. These and other expert groups encourage individuals to reflect and engage

profoundly with others to expand and deepen their perspective. They emphasize personal transformation as an essential accompaniment of system change. Systems Leaders can both develop these capabilities within themselves, and encourage them in others. In this way, Systems Leaders can engage and mobilize the capacity of numerous individuals to benefit the system as a whole.

THE COMMUNITY: Complex systems are populated and driven by diverse stakeholders -- both individuals and institutions. The stakeholders relevant to any given system form a community of actors who interact and influence one another within the system. Ideally, relevant stakeholders are well-networked and well-coordinated around shared interests and the common good. However more often the levels of trust, connectivity and coordination among stakeholders in a system are highly varied. Yet even if they are fragmented and conflicted, most stakeholders in a system share a common interest in the well-being of the system as a whole – and thus are united in a community of interest. Systems Leaders must work to illuminate this community of interest by deepening trust, understanding, and recognition of that shared interest among the diverse actors in a system.

A key role of Systems Leadership is therefore developing, supporting and coordinating action among networks of diverse stakeholders. These activities are not new -- the tactics of building and mobilizing multi-stakeholder coalitions and alliances have been refined over centuries, particularly through advocacy campaigns, social movements and community-based development programs led by civil society, faith-based organizations and political parties. What differentiates alliance-building in the context of Systems Leadership is the explicit goal of broad and long-range system transformation. Alliances become transformational when their members commit to improving the whole system for everyone's benefit, not just their own.

THE SYSTEM: System change initiatives must be grounded in knowledge and insight about how the system functions. Most often complex systems are viewed, understood or experienced differently by their various stakeholders. No single stakeholder has total knowledge of the system; the only way to gain a broader overview is

to pool knowledge, insights and data from many sources. For this reason, diversity is not just desirable but essential to generating a collective understanding of the system, developing effective strategies for action, and perceiving and adapting to change as the initiative evolves.

Developing collective understanding of the system involves debating its boundaries, mapping its elements and dynamics; and considering the environment around the system that influences and enables it, from institutional policies and incentives to personal choices and behaviors. Articulating the role of power dynamics within a system, and identifying who benefits or is disadvantaged by those dynamics, is an important aspect of the mapping and insight. Exploring potential avenues of action and their implications, based on analysis and stakeholder experience, is key to shaping pathways to action.

Systems leaders play a crucial role in guiding this process, facilitating reflective conversation, learning, knowledge-sharing and mapping among stakeholders. They require strong skills in process design and facilitation. A Systems Leader's ability to enable collective learning – and to help capture, articulate and share the resulting insights – is more important than their individual technical expertise. If a Systems Leader is an expert in their field at the start of the process, maintaining an open mind and learning mindset is key.

On a collective level, Systems Leadership requires a shared integrity of vision, participation and action, based on engaging and benefiting all stakeholders in the system. Participants can apply self-assessment tools (described in Annex 2) to reflect on and strengthen key aspects of their approach.

What characterizes a Systems Leadership initiative?

Many ongoing initiatives demonstrate elements of Systems Leadership. Engaging diverse stakeholders has become standard practice for most public-interest programs and projects, embraced by civil society, public and private sector alike. Linking project activities to the goal of system transformation is increasingly common on projects related to the SDGs. In fact, the concept of "system transformation" is

becoming popularized to the point where it is being applied to programs and projects with highly varied approaches and levels of ambition. This points to the need for greater alignment and awareness-building about the definitions and key components of systems transformation and Systems Leadership. This report presents several examples of Systems Leadership based on the following definition and criteria.

A "Systems Leadership initiative" is a project, program or campaign which aims to contribute significant, lasting impact on one or more complex issues by mobilizing action among a diverse array of relevant stakeholders. Systems Leadership initiatives exhibit most or all of the following elements:

- A systemic view both in framing the initiative goals
 as contributing to broader system change; and in
 understanding and exploring the issue at hand as a complex
 system with multiple elements, dynamics and stakeholders.
- Multi-stakeholder ownership and championship

 catalyzing and supporting engagement, co-design,
 collaboration, innovation and leadership among a
 diverse array of stakeholders; and building trust, enabling
 collaboration, and addressing power dynamics in the
 process.
- Clearly designated coordinators or facilitators whose role includes both facilitation of multi-stakeholder collaboration within the initiative (including building alignment, securing commitment, troubleshooting, and supporting ongoing collaboration); and the practical aspects of project management to support initiative activities. These may be individuals or institutions serving as facilitators and providing backbone support.
- An ability to learn, adapt and change sharing emerging knowledge and insights about the complex issue in question; monitoring, evaluating and learning from the experience of project activity; and adapting the initiative strategy in response to new insights, events or conditions.
- Proven or potential influence on system behavior creating systemic impact often takes a long time and is difficult to attribute to one initiative, let alone specific

individuals or institutions. Nevertheless, many initiatives can capture quantitative or anecdotal data that illustrates an impact on not only concrete outcomes, but also the dynamics of the system including policies, investment flows, and stakeholder interactions.

The Challenges of Systems Leadership

Application of the Systems Leadership approach is not a magic bullet – it does not guarantee that systems will transform in a predictable way. However it can play an important role in enabling and accelerating systems transformation, creating the conditions and avenues for change in concert with other interventions. And it can provide an approach for tackling large-scale, complex challenges which cannot be solved in more traditional ways.

Galvanizing systems change is a long-term process that rarely follows a predetermined path; it calls for a tolerance for ambiguity and a willingness to evolve and adapt over time. It requires patience, flexibility and open-mindedness. The diverse activities which often take place under the broad

umbrella of a systems-change initiative can pose challenges for measuring progress, quantifying results and attributing them to specific drivers and actors. In addition, coordinating large numbers of actors and issues can generate high transaction costs.

On an individual level, participating in a systems leadership effort can bring personal challenges. In addition to being ambiguous and time-consuming, it often requires individuals to take risks in committing their influence, resources, trust, and reputations to engaging new partners, often using untested methods. Individuals that embrace the Systems Leadership role often play a central role within the broader network, striving to meet rapidly growing demand for coordination as the initiative develops. This creates a risk of dependency upon key individuals, whose departure or withdrawal can slow progress and create instability within the network.

Given the various challenges, the Systems Leadership approach is best applied to complex issues that cannot be solved through other means.

The Sustainable Food Lab (SFL): An Example of Systems Leadership in Action

The Sustainable Food Lab was born out of an initial series of conversations among systems-change experts, sustainable food system advocates, private sector and philanthropic leaders. Recognizing the need for a broader alliance to improve food-system sustainability, they established the Sustainable Food Lab in 2004. Members from 40+ organizations embraced shared principles of open dialogue, reflection and shared learning experiences, including immersive trips to the field. They generated new insight about the agriculture system which catalyzed a number of collaborative initiatives designed to deliver systemwide impact.

SFL's approach demonstrates how an organization can contribute to each of the three key elements of Systems Leadership, including:

The Individual: SFL invests in developing individual Systems Leaders through its Impact Lab, a learning community engaging 20 Fellows from leading food companies. Through workshops, learning journeys and coaching, the Lab supports Fellows in developing both personal capabilities and professional skillsets for Systems Leadership in the food sector.

The Community: SFL engages a diverse array of food-system stakeholders in new ways. The group has become a platform for collaboration and experimentation, catalyzing and supporting multiple initiatives ranging from specific value chains and system-wide priorities. Examples include:

 The Sustainable Vanilla Initiative, engaging 28 companies and organizations (who together purchase over 70% of the world's vanilla beans) on a pre-competitive basis to improve

- the sustainability and quality of vanilla production while improving livelihoods for producers in Madagascar and Uganda.
- The Cool Farm Alliance, which brings together farmers, NGOs and companies to promote agricultural practices that mitigate greenhouse gas emissions. It serves as a knowledge platform and a forum for sharing resources such as the Cool Farm Tool, developed to measure GHG emissions at farm level.

The System: SFL facilitates stakeholder learning and capacity-building through communities of practice and informationsharing around key food system issues such as climate-smart agriculture, food loss & waste, living income, the role of business in landscapes, and performance management for smallholder supply

The three arenas are highly synergistic: The individuals form new relationships and interactions with the community of stakeholders in ways that benefit the system as a whole.





IV The CLEAR Framework for Leading Systems Change

Most systems-change initiatives do not follow a clearly laid out and defined pathway – they tend to evolve over time. There are several reasons for this. Complex issues emerge and develop over long timeframes; systems-change initiatives must adapt to this gradual evolution as well as to unforeseen events and disruptions. The members of multi-stakeholder coalitions also change over time. Many systems-change efforts call for innovation and experimentation, thus tactics and outcomes are not pre-determined. Approaches to systems change are relatively new, and still being developed and defined. As a result the goals, stakeholder coalitions and tactics of systems-change initiatives may evolve continuously.

There are certain recurring themes which appear in nearly all systems-change efforts. These include both tactical steps (the "what") such as deepening understanding of the system as a whole; bringing stakeholders together to define a shared agenda for change; and encouraging new forms of collaboration and solution-building. They also include behavioral attributes (the "how") such as keeping an open mind, building trust, and staying humble. The recurrence of these themes in diverse settings and venues underscores their centrality to systems-change processes, suggesting a widely recognized set of tactics and behaviors that form the heart of Systems Leadership.

Drawing from these common themes and the diverse Systems Leadership experiences they represent, a high-level framework can be defined and is presented below. Understanding and applying the key elements of this framework can help stakeholders develop and advance systems-change initiatives and serve as Systems Leaders.

The CLEAR framework for Leading Systems Change sets out five key elements of the systems-change process. These are: Convene and Commit; Look and Learn; Engage and Energize; Act with Accountability; and Review and Revise. The five elements align with the stages of many systems leadership processes. However they are not strictly chronological. Elements may overlap, or may repeat in cycles and feedback loops throughout the course of an initiative. Each is described and illustrated on the following pages.

Stakeholders leading systems-change initiatives may find it helpful to jointly review their progress in relation to each of the five elements. Annex 2 presents "questions for reflection" aligned with the CLEAR framework that stakeholders can consider and discuss together as a self-assessment tool.

The CLEAR framework



1 CONVENE AND COMMIT

Systems-change efforts often begin in response to a serious problem or challenge within a complex system. Stakeholders who have found that they cannot solve this problem alone are motivated to begin exploring, with others, how to change the existing system dynamics. Dialogue among diverse stakeholders - often with quite different interests and perspectives - can lead to the recognition of a shared interest and highlight the potential value of taking collective action.

Systems leaders can help initiate this process by facilitating a new type of conversation among stakeholders about the issue of common concern. The new aspect of the conversation can be new information on the scope or drivers of the problem at hand; new opportunities for action; or new perspectives from stakeholders who don't normally engage with each other. The new aspect can also relate to how the conversation takes place, engaging stakeholders outside of traditional patterns of hierarchy, positioning and thinking. The key is to help stakeholders see the dynamics of the system, the opportunities for action, and the role they can play, in a new light. The resulting spark of recognition brings excitement and interest which can catalyze the entire systems-change process.

Systems Leaders can create that spark by convening a thoughtfully selected group of stakeholders into a curated dialogue to address an issue of common concern. The diversity of the stakeholder group is key: it helps ensure that many aspects of the system are represented, including and especially those who are often marginalized in traditional hierarchies and decision-making processes. This encourages stakeholders to look beyond familiar viewpoints and explore new perspectives. Stakeholders may include:

- · Private-sector companies (e.g. large and small, local and international)
- · Nonprofit organizations (e.g. advocacy and servicedelivery, local and regional/international)
- Community Associations (e.g. community or workers associations)
- Donors (charitable foundations, government or multilateral donor agencies)
- Governments (city, state or national)
- International organizations
- · Universities and research institutions
- Individual end-users or participants in the system (e.g. consumers, farmers, workers, voters, mothers, community members)

Ensuring balanced participation among stakeholders in the dialogue is also important to avoid having certain individuals or groups dominate or feel sidelined. This requires active curation and facilitation of the dialogue by a trusted neutral party to establish a "safe space" – one in which all stakeholders feel included and valued; and one in which diverse viewpoints are welcomed. It provides a constructive setting for surfacing conflict and discomfort, in which differing viewpoints, inequities among stakeholders, and tradeoffs can be openly discussed. Skillful facilitation is essential to enable constructive, open discussion among diverse groups who have differing priorities, incentives and constraints.

Systems Leaders can strike a balance between inviting individual perspectives and encouraging alignment around a shared agenda or concern. A skilled facilitator can lead the group through a series of dialogues to exchange perspectives and deepen understanding of the system; share ideas and brainstorm potential solutions; define and commit to a collective effort to implement those solutions. Through this process, a shared agenda takes shape and is often defined in the form of a vision statement or specific goal. Stakeholders may commit to collective action or agree to pursue independent actions toward a larger aggregate goal.

To pursue a shared agenda, stakeholders often must overcome historic patterns of distrust and competition. Systems Leaders must work carefully to address these challenges. A broadly framed agenda aimed at improving the system for all players, and allowing flexibility and autonomy among stakeholders working to achieve it, can help gain widespread buy-in.

Commitments are often developed in stages – starting from stakeholders pledging to work together towards an aspirational vision and progressing to more specific and measurable goals. This allows stakeholders to join together under the broad umbrella of a shared vision,

1 CONVENE AND COMMIT

then take time to develop trust and specific actionable commitments related to that vision. Certain pathways of action may imply tradeoffs or affect stakeholders differently; the Systems Leader can help facilitate open dialogue and explore avenues to address these including supporting or compensating those affected by systemic change; and positioning collective efforts as pre-competitive among companies or organizations that normally compete for market share and influence.

Systems Leaders may encounter situations where it is not possible to secure full consensus on a shared goal - whether due to resistance from vested interests in the system, divergent priorities, or other challenges. In these situations, the shared agenda can be defined very broadly or ambiguously in order to embrace diverse viewpoints and create enough convergence to move forward. Alternately a subset of committed champions can agree on a direction, generate momentum, and work to build broader buy-in based on their visible commitment and demonstrable results from their actions.

We Mean Business Coalition: Mobilizing Commitments at Scale

The We Mean Business Coalition was established in 2014 to create a unified business voice in advocating for ambitious, science-based climate policy while enabling and encouraging action by individual companies.

The coalition was co-founded by seven business-convening organizations: Business for Social Responsibility, the CDP, Ceres, the B-Team, The Climate Group, the Corporate Leaders Group, and the World **Business Council on Sustainable** Development. Through their existing membership networks, these groups engaged nearly 1,000 of the world's largest companies, with a total market capitalization of \$19.3 trillion.

The coalition was conceived by senior executives at IKEA and Nike who had long track records in advancing corporate environmental sustainability. They saw a need to provide companies with a way to navigate the complexity of the climate policy debates and make a meaningful contribution, influencing both policy and markets. The group built alignment around a shared vision of the future - including netzero emissions by 2050, and a 1.5 C limit. They shared system-mapping tools and insights. They identified and pursued opportunities for policy influence and emissions impact, enabling a decentralized approach with a common

message. They established a Secretariat with a CEO to coordinate the Coalition activities and partners. The seven founding organizations committed to a "radical collaboration" approach, prioritizing their shared mission and impact over visibility and recognition for their own organizations.

In the lead-up to the Paris Agreement, Coalition activities included:

- Advocacy: The Coalition provided an influential private-sector voice in advocating for ambitious emissions reduction targets, uniting around a set of concrete proposals to policymakers. They joined forces with diverse stakeholders to push for ambitious targets.
- Action commitments: Coalition member companies made over 1500 specific commitments - for example, nearly 200 companies have committed to transition to 100% renewable energy, in a campaign that was supported and amplified by civil society. Other companies committed to realize deforestation-free supply chains; and to accurately report climate-related risks to investors.

• Business incentives: The conveners and companies worked together on a pre-competitive basis to articulate the business case for reducing emissions and investing in a low-carbon economy; and to define the costs and risks of inaction in business terms.

Following the Paris Agreement, the Coalition drew up a collaboration framework to focus on implementation. It adapted to new developments, responding to the U.S. withdrawal from the Paris Agreement by co-founding the U.S. Climate Alliance and launching a "We are Still In" media campaign engaging CEOs and leaders of state and city governments. It leveraged its momentum to address systemic issues, encouraging the formation of a new initiative called The Investor Agenda to promote similar action on climate change by the financial sector.





2 LOOK AND LEARN

To change a complex system, stakeholders must first understand how the system works – the components, actors, dynamics, and influences that together create the system and its current outcomes. This requires learning and inquiring with an open mind. Most stakeholders have experienced and learned about the system from one point of view. Truly understanding its many dimensions requires absorbing new information and learning from other stakeholders' viewpoints and perspectives. This means constant dialogue, underpinned by radical and empathic listening, enabling each actor to have a deeper appreciation of the multiple perspectives on a particular system.

A collective effort to share perspectives and build a shared understanding of a complex system has a powerful positive influence in the early stages of a systems-change process. It establishes a precedent of inviting and integrating diverse perspectives; develops a shared knowledge base co-created by participating stakeholders; and surfaces new insights that can catalyze innovation and collaboration throughout the systems-change process.

Stakeholders can undertake system mapping informally (learning through dialogue and presentations) or in a more structured way (systematically building a shared map of the system). The systems mapping process works best when it takes place collectively and iteratively - with stakeholders building, reviewing, and refining their shared map in several rounds. It is important for the process to be interactive and inclusive, engaging input not only from recognized experts but from all participating stakeholders. In this way the mapping process has a democratizing effect on systems knowledge and expertise.

Scientists have developed extensive theoretical models and data-driven analyses that are used to help explain how complex systems – such as natural ecosystems or the global climate - behave, though they cannot control systems behavior. The System Dynamics approach, developed by Jay W. Forrester of MIT and others, uses computer-aided models to analyze and simulate problems that arise in complex social, economic, managerial or ecological systems. The models allow the testing of different action pathways through simulating different scenarios.

Some find detailed or computerized mapping to be too mechanistic or confusing. Alternate approaches to system mapping include interactive discussion, visual mapping, analysis and synthesis. Stakeholders can also learn through direct personal experience and observation -- through learning journeys to observe and interact with issues on the ground; through personal reflection; and through

feeling and sensing dynamics in the system. Regardless of the tools being used, most agree that mapping should be co-created through live, interactive discussion with diverse stakeholders together in one location. This allows for discussion, exploration and inquiry drawing from different knowledge bases and points of view.

Through mapping, stakeholders may identify key elements of complex systems such as:

- **Boundaries:** Open systems have permeable boundaries that allow interface with their environment; closed systems have more resistant and static boundaries.
- Components or Stocks: Elements or assets of the system including natural resources, investment, stakeholders (individuals and institutions), or infrastructure. Intangible elements such as trust or confidence can also be components with distinct roles or influences in a system. Stocks can accumulate, creating counter-intuitive behavior in the system.
- Flows: Changes that occur over time within the system, leading certain elements to increase or decrease.
- Causal chains: The root causes of an issue set in motion causal chains which generate the more visible symptoms of the problem.
- · Feedback Loops: Causal relationships within the system, or between system and environment, which may restore equilibrium (balancing loops) continue or accelerate a certain dynamic (reinforcing loops).
- **Delays:** Delays affect the timing of a signal or event within a system.
- Interdependence and interaction: System components may be mutually dependent or influential.
- **Endogenous behavior:** System behavior that is primarily driven by factors within the system, rather than triggered by outside causes.
- Emergence and adaptation: Complex systems are constantly evolving, learning and adapting. The collective behavior of a system's components may lead to the emergence of new system behaviors.

2 LOOK AND LEARN

For example: in the complex system of the global climate, greenhouse gas emissions (a component) play a key role. As they increase over time (flow) the resulting temperature increase melts glaciers, further accelerating warming (reinforcing loop). Another example is the stock market, where investor confidence (a component) can drive investment or divestment (flows) leading to runs or selloffs (reinforcing loops). The food system has permeable boundaries, interacting with and responding to dynamics in ecosystems, economic systems and social systems – often with delays, for example when the effects of a drought are felt months later through rising food prices.

The fundamental need is for systems to be understood in as holistic a sense as possible. How do they behave overall? How do they interact with their environments? What are the relationships between those stakeholders operating within the systems?

Stakeholders engaging in a system mapping process should expect surprises and occasional discomfort. They may discover new perspectives or information; new ideas for action or collaboration; or system and power dynamics that are difficult to explain or justify. It is important to allow for review, discussion, and synthesis of the mapping exercise so that the group can share perspectives on its outcomes and absorb the overview it provides.

The Global Alliance for Improved Nutrition: Targeting key gaps in the system





The Global Alliance for Improved Nutrition (GAIN) was established in 2002 as an independent non-profit foundation with a multi-stakeholder governance and funding structure, as well as a strong technical advisory component.

GAIN invests significant effort in research, policy analysis and strategy development to build knowledge about the drivers of malnutrition as well as potential solutions, in the context of the entire food system. This research, combined with expertise in a broad array of partner organizations, enables GAIN to take a systemic view of malnutrition and shape its strategy accordingly. The organization focuses the majority of its programs reducing micronutrient deficiencies as a high-impact intervention to improve nutrition and health. It pursues this goal through a partnership-focused strategy, including:

- Supporting large-scale, country-led national food fortification programs; and
- Catalyzing innovative market-based solutions to leverage the capabilities of the private sector.

Learnings from these programs and stakeholder dialogues have prompted GAIN to develop new initiatives to address key gaps in the system. For example,

- To improve the scalability and impact
 of market-based solutions for nutrition,
 GAIN developed new programs to
 strengthen demand, improve the
 business enabling environment, provide
 catalytic finance to the private sector,
 and build capacity among SMEs. It also
 supports research, knowledge exchange
 and impact assessment to identify and
 disseminate effective market-based
 strategies.
- To strengthen nutrition among vulnerable populations, GAIN developed partnerships targeted to the specific needs of children, adolescents and the workforce.

In 2017, GAIN reached nearly 250 million people with nutritious foods, and nearly 60 million through behavior change communication, through programs conducted in 26 countries worldwide. In addition to direct program delivery, it continued working to strengthen the enabling environment to improve the consumption of safe and nutritious foods.

3 ENGAGE AND ENERGIZE

Complex systems function as they do because they are full of life - made up of people, other species, and elements that interact with each other and their environments. They are living systems. Relationships between people profoundly influence the ways in which their living systems behave. People who are inspired to work toward system change will seek to exercise their influence, personal capabilities and access to resources to influence the direction and manner of change. Doing that in concert with other actors magnifies the impact. As a result, building and nurturing relationships between stakeholders in a system, and encouraging them to get engaged and energized, is a key role of the Systems Leader.

Stakeholder engagement means involving all stakeholders through a continuous process of convening, conversation and collaboration. This involves both one-on-one and group discussions to build trust, exchange perspectives, and coordinate efforts as the systems-change process unfolds. At the start of any systems-change process it is essential to engage a broad, diverse array of stakeholders or their representatives – including critics and challengers - as partners in dialogue and co-creators of the vision and direction. Exclusion of a major stakeholder group at the start of a new initiative can significantly undermine its ability to build widespread commitment and maintain momentum over the long term.

Maintaining stakeholder engagement over the considerable time period of a systems-change effort requires open and continuous communication among a broad network. This helps to build relationships; generate trust, commitment and enthusiasm; and enable new forms of collaboration, innovation and co-creation. It facilitates the pooling of resources and capabilities to develop new solutions.

Over time, the relationship-building, communication and collaboration among a network of actors contributes to the development of a sense of shared identity and mission for the broader systems-change effort, encouraging stakeholders to contribute to the broader collective good.

Systems change requires energetic effort and momentum. Systems Leaders can help build this momentum using an array of creative tools, such as:

· Inspiration – Creating an inspiring vision for the future, cultivating stakeholders' emotional commitment to create positive change, and maintaining optimism among the network.

- Goal-setting Stakeholders may wish to establish goals with three time horizons: long-term ("north star" goals); medium term (changes to the system); and near term (actions for immediate impact). Mobilizing "quick win" actions that will deliver near-term impact can help generate momentum and confidence within an alliance.
- Innovation incentives and enablers Encouraging the development of new approaches through competitions, hackathons or prizes; and enabling their development through supporting platforms such as accelerators.
- New financing or investment Providing or unveiling new sources of catalytic or innovative finance, public investment, or matching funds that expand the resource base to fuel action.
- Visibility and reputational capital Recognizing and celebrating commitments, innovations and progress through formal and informal recognition.
- High-level leadership support Leveraging highlevel support can boost momentum both at the start of an initiative (such as through a leadership mandate for action) and at key points along the way (including periodic leadership convenings to report progress and reaffirm commitments). Linking the systems-change process to key milestones or processes in the public realm (e.g. leadership events such as the COP climate summits; goals such as the SDGs; or other events) can provide a time-bound goal for stakeholders to work toward.
- Progress markers and milestones Systems Leaders can also make use of progress markers or milestones to galvanize action toward a specific deadline, goal or milestone. This helps create manageable timeframes in which to motivate progress.

3 ENGAGE AND ENERGIZE

Systems Leaders play a key role in developing and maintaining engagement and momentum in a systemschange process. They are called upon to demonstrate sensitivity to the dynamics among stakeholders, navigating concerns and conflicts to build constructive relationships.

The sustained, energetic commitment of systems leaders can help to mobilize and empower networks of involved stakeholders, encouraging new forms of collaboration, innovation and co-creation.

The New Vision for Agriculture Initiative: Mobilizing action at global, regional and national levels



For the past decade, the World Economic Forum's New Vision for Agriculture (NVA initiative) has catalyzed and facilitated multi-stakeholder collaboration and action at global, regional and country level. The initiative and its affiliated partnerships engage over 650 organizations and 1500 individual leaders throughout the year, driving action on the ground in 21 countries across Asia, Africa and Latin America.

The NVA was catalyzed in 2009 at the request of a group of leading food and agriculture companies that were concerned about the sustainability of the global food system. The group engaged in extensive dialogues with a broad array of stakeholders including leaders of farmers associations, global and local business, government, international organizations, nonprofit groups, research and academia. Together, they defined a shared vision for transforming the agriculture sector to deliver food security, environmental sustainability and economic opportunity to its stakeholders.

Responding to this global vision, government leaders in Tanzania, Vietnam and other countries requested the Forum's support to establish multi-stakeholder alliances to pursue the New Vision for Agriculture at national level. The NVA's model for country-led, market-based, multi-stakeholder partnerships spread quickly to 21 countries, catalyzing over 90

value-chain initiatives. Collaborations with inter-governmental bodies including the then-G8, G20, African Union and ASEAN helped galvanize both investment and policy commitments.

The NVA utilized several strategies to engage, motivate, and maintain momentum among its extensive stakeholder networks. These included:

- · Leveraging high-level meetings as milestones: The initiative used the World Economic Forum's high-level leadership convenings as milestones to set goals and assess progress. By engaging global leaders in Davos and regional leaders in the Forum's regional summits, the initiative maintained momentum as partners worked to achieve concrete progress before each meeting. Inter-governmental summits (such as the G8, G20, AU and ASEAN) were also used as opportunities to strengthen political support.
- · Cultivating collective leadership: The initiative established, curated and supported numerous leadership-level steering groups at the global, regional and national level to shape strategy and drive progress. This built and reinforced alignment, trust and collaboration among diverse leaders working toward a shared mission, resulting in sustained and committed leadership engagement.
- · Combining high-level commitment with action on the ground: The initiative secured high-level leadership commitment from its stakeholders, then leveraged it to ensure support for project leaders charged with

- delivering impact on the ground. This connected and built synergy among a global vision for systemic transformation with country-level goals and project-related targets.
- Building backbone organizations to drive local action: The NVA catalyzed and helped establish numerous new organizations at both national and regional level to institutionalize their multi-stakeholder collaboration networks. These included the Grow Africa and Grow Asia regional platforms; as well as independent national-level organizations in Mexico, Tanzania, Indonesia and Vietnam.
- Encouraging continuous innovation and learning: The initiative played a thought leadership and knowledgesharing role through publishing reports and guidebooks on new partnership models, program learnings, and food system trends and scenarios. It established a 150-member Transformation Leaders' Network to exchange experiences and best practices, and provide peer support and collaboration, among practitioners leading action throughout the NVA network.

The Forum used its role as a trusted, neutral convener of leaders from all stakeholder sectors to engage and motivate stakeholders through the NVA and other projects.

4 ACT WITH ACCOUNTABILITY

Making systems change a reality requires action that demonstrably influences the system or drives specific outcomes. In large-scale systems-change initiatives, a wide array of stakeholders throughout the system can take action in a decentralized manner, in pursuit of a shared goal. Systems leaders can galvanize and support distributed, multi-stakeholder action that is self-directed but aligns with the broader network's shared vision and goal. At the same time, they need to be able to demonstrate results and encourage mutual accountability for both individual actions and collective impact.

Galvanizing decentralized action across a large network requires several tactics to manage the associated complexity and risk and to ensure a sense of mutual accountability. These include:

- **Goal-setting:** The network can agree on goals for impact at the level of the system, coalition and projects. These should ideally include quantitative and measurable goals; however they may also include qualitative goals, often related to system dynamics, which are more difficult to measure (for example trust, commitment and collaboration among stakeholders in the system).
- **Principles:** It is important for stakeholders to agree on a set of core principles or criteria for action, to ensure that the collective efforts reflect agreed values or desired outcomes among all. Many systems-change initiatives involve large networks of stakeholders taking action in a decentralized manner toward a shared goal, under a shared umbrella or brand. This can create operational or reputational risk for the network or its participants, as problems generated by one actor or project can affect the entire coalition.
- Coordination Frameworks: Coordination support is key to focus efforts and streamline transaction costs generated by multi-stakeholder collaboration. This may take place informally – through regular group meetings, updates, plans and reports. Such informal coordination - or interim support structures - allows for flexibility as the initiative evolves. Many initiatives eventually establish new institutional and governance structures to support, guide and manage the network's activities over the long term.
- Independent evaluation can be an important instrument for assessing progress and highlighting opportunities for improvement. Evaluators should be selected, and their methodology defined, with input from all stakeholders in the network to ensure credibility and buy-in to the result. Independent evaluation is

- often hampered by the difficulty of measuring widely distributed, early-stage action; and by the substantial funding and timeframes required for a full-scale evaluation. Stakeholders may define "light-touch" evaluation frameworks to track progress during the early stages.
- Conflict resolution mechanisms: Multi-stakeholder alliances in early stages of work often do not define formal grievance procedures or conflict resolution mechanisms until a specific need or crisis arises. Alliances can define a clear, transparent and trusted framework for addressing issues that is known and accessible to all relevant stakeholders. This becomes invaluable when needs arise suddenly or urgently, providing an agreed avenue to respond to and address challenges.

The key driver of impact in systems-change processes is action - often innovative forms of action that would not have otherwise taken place. Among market-based actions, for example, strengthening business model innovation is key to enabling and scaling new solutions. This may take place through new collaborations between companies and other stakeholders. To enable the development of promising or viable business models, new financing models and innovative forms of investment – including blended finance - can have a significant effect in catalyzing and accelerating action. Other actors in the system may be able to change enabling policies, incentives or infrastructure, while others might provide technology platforms or pathways to change consumer behavior. All are often necessary to drive systemic change. Understanding different roles and resources, and finding ways to track mutual accountability is key to sustaining collective action.

At the same time, Systems Leaders are called upon to develop and balance the tension between actions that will deliver near-term impact ("quick wins"), and strategies to create long-term systemic transformation ("gamechangers"). Whereas quick wins are pragmatic and can help

4 ACT WITH ACCOUNTABILITY

generate momentum and enthusiasm, game-changers take longer to achieve and involve more profound shifts in the dynamics of the system. Both have value and represent different, often complementary aspects of the change process.

As systems-change initiatives evolve, they often grow in scope and complexity and require new structures and governance systems to support, track and account for large-scale collaborative action. These often take the form of a coalition Secretariat, either based within an existing organization or set up as a new and independent entity. Several key lessons have emerged from such ventures, including:

• Establishing new institutional and governance structures can be a valuable enabler to support multi-stakeholder action over the long term. However this often generates

transaction costs and forces the network to focus internally during the setup phase, thus it can limit or slow momentum if implemented too early in the process.

- Designing a formalized, well-managed multi-stakeholder governance structure is essential to ensure credibility and effectiveness. The governance structure should reflect the multi-stakeholder composition of the larger network.
- The importance of securing **multi-year funding** for the new entity, making the case to donors for investing in enabling systems change
- The challenges and transaction costs of setting up new operating capacity are often underestimated. Alliance members can reduce these by providing in-kind support (for example, human resource and finance management for a new Secretariat) or advisory support (for example, on effective governance and operational structures).

Every Woman Every Child: Building accountability across a large network





Launched in 2010 by the UN Secretary-General, Every Woman Every Child (EWEC) is a global movement that intensifies action by governments, multilaterals, the private sector and civil society to address the health challenges facing women, children and adolescents through financing, capacity-building, partnershipfacilitation and knowledge-sharing. The movement engages hundreds of organizations across its various activities.

EWEC defined a Global Strategy outlining a roadmap toward the goal of ending preventable deaths of women, children and adolescents within a generation, through the key areas of:

· Strengthening country leadership and management capacity, with multistakeholder accountability and oversight at country level;

- Improving financing for health programs targeting women, children and adolescents, including through a Global Financing Facility coordinated by the World Bank which aims to mobilize USD 57 billion for evidence-based, highimpact programs;
- Strengthening health system resilience, including expanding access to care and emergency management capacity; and special attention to the needs of vulnerable populations in emergency settings;
- Investing in individual potential, safety and well-being and strengthening community support for women, children and adolescents.

The strategy also prioritizes ongoing research to identify effective policies and practices, test new approaches through an Innovation Marketplace, and build country capacity to implement effective strategies. It calls for continued cross-sector, multistakeholder collaboration.

The EWEC movement has developed several structures and strategies to ensure coordination and accountability across its broad network to deliver on the Global Strategy. These include:

- Voluntary commitments in support of the Global Strategy are encouraged from all stakeholders. Between 2010-2015, 334 stakeholders made 428 commitments. including USD 45 billion in funding, of which USD 40 billion was disbursed.
- A Unified Accountability Framework, which includes a monitoring plan, peer review and annual report cards at global and country levels; as well as an Independent Accountability Panel that reviews progress annually.
- A Global Secretariat which serves as the coordinating hub for the movement's governance, resourcing, and delivery of its global strategy;
- · A High-Level Steering Group, comprised of Heads of State and Government, and leaders of business, philanthropy, civil society and international organizations.

5 REVIEW AND REVISE

Systems change is an ever-evolving process of adaptive experimentation, learning, growth and change. It is important for systems-change initiatives to embrace these dynamics with an agile, flexible, innovative and learning-centered approach. That encourages stakeholders to apply innovations with a spirit of entrepreneurship – testing new approaches, evaluating the results, learning from the outcomes, and applying those learnings to a strengthened approach in the next round.

Several elements are key to effective learning and improvement through a systems-change initiative.

- **Measurement Frameworks:** In the early stage of the initiative, when stakeholders define the initiative goals, it can be highly valuable to also agree on the indicators that will be used to measure progress. The challenges of measuring both tangible and intangible progress in an evolving systems-change initiative are discussed further below.
- Monitoring and Reporting: Regular monitoring and reporting to initiative leaders and partners is essential to provide visibility on progress, identify challenges and obstacles, and adjust strategies accordingly.
- Evaluation: Periodic evaluations of the initiative's results and impacts are highly important for initiative leaders, participants and funders/investors. The challenge is that tangible outcomes are often difficult to measure in the early stages of a systems-change initiative.
- Knowledge and Experience Exchange: Informal sharing of experiences, good practices, and solutions developed through the initiative can be highly valuable for cross-network learning and innovation both within and beyond a systems-change initiative. Knowledgesharing can focus on both action (such as innovative project strategies and business models), and process (such as the tactics of coalition-building, conflict resolution, governance, etc.).

Measuring progress can be challenging in the context of a systems-change initiative. Where feasible, indicators that demonstrate tangible impacts on the problem to be solved (e.g. savings in water usage, reduction in greenhouse gas emissions, increase in production or

distribution of essential goods and services) can be highly valuable to demonstrate impact and build further momentum. Indicators that track network activity – i.e. financial investments committed to initiative projects and operations; number of organizations engaged, meetings held, etc. – can also be useful to demonstrate action, though they do not prove outcomes. Given the long-term, evolving, and sometimes ambiguous nature of systems-change initiatives, it can be difficult to measure some of the more intangible value that is generated by the network - such as trust, collaboration, and avoided outcomes (for example, negative health or environmental impacts that did not occur due to changes driven by the initiative). Even when a set of indicators is agreed, it can be difficult or costly to obtain the necessary data, let alone analyze it.

Many initiatives respond to these challenges by defining a tiered measurement framework tracking project activity and impacts as well as broader shifts in the system; combining both project-related and publicly available data, as well as case studies that enable the capture and sharing of experiences. Others accept that the nature of systems change is relatively opaque and cannot be adequately measured, thus rely on descriptions of network activity and anecdotal illustrations of impact.

For systems-change initiatives, sharing results and learnings from the initiative activities is an important way to demonstrate transparency and commitment to all stakeholders. It can not only benefit the initiative, by strengthening its knowledge base and strategy, but also can benefit others seeking to learn from the initiative experience.

5 REVIEW AND REVISE

The Water Resources Group: Evolving to Embed New Capacity in the System





The 2030 Water Resources Group (2030 WRG) is a global partnership that supports country-level collaboration, housed at the World Bank. Its mission is "to help countries achieve water security by 2030 by facilitating collective action between government, the private sector, and civil society," with government in the lead. It engages over 600 organizations in collaboration on projects and policy reforms in 14 countries and states, based on each country's context and needs. Initiatives include improving efficiency of water use for agricultural or industrial purposes; and wastewater treatment and reuse.

Founded in 2008, the 2030 Water Resource Group is a mature partnership which has gone through distinct stages of evolution in developing, scaling and anchoring its contributions in the global water arena. These stages of evolution were shaped and implemented by its partners and stakeholders, and informed by review and evaluation. The partnership therefore serves as an interesting example of growth and evolution among more developed Systems Leadership initiatives.

The stages of evolution of 2030 WRG have included:

- · Ideation and preparation (2008-09): The International Finance Corporation (IFC) and the World Economic Forum convened a group of leading organizations concerned about global water scarcity. They commissioned the development of an analysis that outlined the urgency of increasing water scarcity; and defined the cost and potential impact of a range of solutions. These conclusions were widely discussed at World Economic Forum leadership meetings and beyond, catalyzing the development of an informal multi-stakeholder network of organizations motivated to take action on water security.
 - The 2030 WRG was formally launched, coordinated by a small team based at the World Economic Forum. It developed an approach called ACT - Analyze, Convene, Transform - to guide its approach in five initial pilot geographies in India (both nationally and in the state of Karnataka), Mexico, South Africa and Jordan. As the demand for on-the-ground impact and presence grew, 2030 WRG partners agreed to transition the partnership to IFC in order to be better positioned for countrylevel operations.

• Incubation (2010-2012):

• Demonstration (2012 - 2018): The partnership was established at IFC with a more formalized structure, including a high-level Governing Council and a more hands-on Steering Board. A strong Secretariat team was established, led by a respected senior leader in the water sector. Over several years the partnership's funding grew and its scope of activity extended to nine new countries and states in Asia, Africa and Latin America.

The 2030 WRG evolved across these three phases based on experimentation and learning from both successes and failures. The group commissioned two external evaluations which identified both strengths and challenges, generating specific recommendations for improving issues such as transparency, inclusion and measurement. The partnership's leaders, partners and donors have continually discussed and sought to evolve the partnership in response to stakeholder input and opportunities for impact.

Applying the CLEAR Framework

The five elements of the "CLEAR" Framework capture key strategies to be considered when leading for systems change. Stakeholders wishing to apply this framework to their own initiatives can use the "Questions for Reflection" included in Annex 2 to assess the progress, strengths, and opportunities for further development of their initiative.

However the actual experience of leading within a systems-change process is not so neatly packaged. Instead participants often experience it as a personal and collective learning journey, rife with uncertainty and discovery, and featuring many ups and downs. Some of the stages of this journey are characterized in the following section.

V The Journey of Systems Leadership: The "Aha! Moments"

The reality of Systems Leadership is that it is never a sequence of discrete actions: the process of systems change unfolds over time, often without a clear roadmap. Many participants describe the experience as a collective "journey" of discovery, developed through constant collaboration and learning among all who are involved.

The organic nature of this journey can be beneficial, allowing for experimentation and adaptation to new approaches. The experience often influences participants' principles, perspectives and actions in unexpected ways. As a result the journey itself has value, often influencing the stakeholders and dynamics of the system well before the more explicit project goals are reached.

However the lack of a defined roadmap in many systemschange initiatives can create uncertainty and inefficiency as stakeholders work to define the way forward. The scope and complexity of a systems-change initiative can feel overwhelming without a clear plan to navigate it.

Fortunately, many Systems Leaders face similar challenges in the course of their journey. The insights and solutions they develop in response can be highly valuable to others. Sharing stories, experiences and learnings can thus be a powerful way to build capacity, avoid pitfalls and accelerate progress among systems change efforts. For example, the World Economic Forum established a **Transformation Leaders Network** to exchange experiences, lessons and best practices among 150 local leaders and global partners in its New Vision for Agriculture initiative. The program ran for five years, resulting in dozens of new collaborations, replication of innovative approaches, and the development of new tools to share best practices.³¹ It also provided a peer-to-peer support network for Systems Leaders in the agriculture sector.

Systems Leaders in all sectors often encounter similar dynamics or realizations in the course of their journeys. These often crystallize in an "Aha! Moment" – a new insight that describes what a group of stakeholders is experiencing at any given stage of the journey. While not every initiative or individual experiences every one of these moments, they appear frequently across many Systems Leadership stories. As a result, they may serve as useful reference points for stakeholders trying to navigate an ambiguous systems-change initiative. These recurring insights and "Aha! Moments" are described below.



"No one is in control": Influencing, but not directing, the behavior of complex systems

Stakeholders seeking to tackle a big, systemic issue usually find that it is so broad and so complex that no single person or organization has authority over all of its components. This is normally the case for complex systems – for example food systems, health systems, and transportation systems. Each one of these involves stakeholders who have authority over certain aspects of the issue – for example governments set health policy, companies produce pharmaceuticals and medical equipment, medical professionals provide health services, schools and community groups provide health education, research institutes provide analysis and insight, citizens and patients make decisions that influence the trajectory of their own health. But no single organization

controls every aspect of the health system. Instead the system is made up of parts that have varying autonomy, and that interact and influence each other to different degrees. Individuals and organizations can influence the broader system through sharing ideas, mobilizing resources, and building alliances to change the way it operates. Systems Leadership offers approaches that can be used to marshal such networks and catalyze momentum.

The realization that no single entity has complete control of an entire system may be surprising or uncomfortable for stakeholders who are accustomed to exercising power in their own domain. And it may be frustrating for others who wish that one entity would come in and "fix" the ways the system works. In fact, many initial dialogues involve some degree of finger-pointing as stakeholders criticize each other



for exercising too much control in the system or not doing enough to fix it. But through exploring the systemic issues at hand, a larger picture becomes clear – one based on interdependence among diverse actors in a system, rather than control by one or more entities.

One of the best ways to generate this understanding is through multi-stakeholder dialogue with a trusted facilitator. Participants in such dialogues can gain new insight into the complexity of their systems, the differing perspectives and contributions of its stakeholders, and the goals and priorities for change that are broadly shared. Realizing that no single entity can control or fix the system can lead stakeholders to recognize and embrace their collective responsibility to do so together.

Two initiatives facilitated by the World Economic Forum focus on improving the dynamics of the system rather than generating tangible near-term impact. **Friends of Climate Action** is a multi-stakeholder platform that works to deliver increased ambition on global climate action; and the **Food Systems Dialogues** (co-convened with WBCSD and EAT) works to build insight and alignment among stakeholders focused on agriculture, nutrition, and environment.

2

"It's up to us": Sharing responsibility for collective and effective action

If no single organization is able to solve the systemic issue at hand, then who will? Stakeholders engaged in dialogue around a particular challenge often quickly arrive at the realization that "it's up to us." In this moment, a group of diverse stakeholders will often transition from exhorting or criticizing others for not solving the problem to recognizing a collective capacity and responsibility to solve it themselves. This is a profound shift which influences the entire trajectory of the systems-change effort. It is a moment in which each individual and each organization recognizes that they have a valuable role to play that is recognized and accepted by other actors in the system. This unleashes ideas and capacity to address the problem in new ways, through new collaborations.

In June 2010, a group of 80 stakeholders were convened by the World Economic Forum in Cape Town, South Africa to discuss challenges in Africa's food systems. The group included farmers, academic experts, farmers, government leaders, business executives, nonprofit leaders and officials from international organizations. They split into groups to discuss specific aspects of the system, then explored how these connected. What was needed, they concluded, was holistic action addressing the entire value chain and all its enablers, involving all stakeholders. It was clear that this would need to be a collective, multi-stakeholder effort - and that no organization in the room had undertaken something of this scope before. At the same time, the group realized that they had all the key stakeholders and capacities in the room - what was needed was to get organized and act. "SOMEONE has to get things started!" a participant wrote in large letters on the whiteboard. This meeting served as a key stepping stone toward a major regional initiative, Grow Africa, that was launched in 2012 by the African Union, NEPAD, and World Economic Forum to mobilize investment and partnership in African agriculture.

3

"Everything is Connected": Appreciating the interplay within complex systems

Before taking collective action to improve a complex system, stakeholders must first have a shared understanding of the systems they are seeking to change – including all elements, stakeholders, dynamics and connections. By nature, complex systems are almost impossible to understand in their entirety. However by pooling their knowledge and perspectives, diverse stakeholders in the systems can construct a shared understanding of the systems at hand. This shared knowledge base provides an essential foundation for identifying needs and opportunities for action.

There are many ways to create a shared "map" of a complex system – ranging from sophisticated computer programs to interactive workshops with visual aids such as post-it notes. Some groups accomplish this mapping and information-exchange purely through dialogue. Regardless of the format, the mapping process plays several vital roles in the crucial early stages of a systems-change initiative. It establishes a shared knowledge base, built on information contributed



by all participants. It builds trust by enabling everyone's perspective to be heard and validated. And it surfaces shared interests, sometimes in unexpected ways, which can serve as building blocks for developing a shared agenda and robust strategy. While the process takes time, it is well worth the investment.

Stanford ChangeLabs used mapping in working with the Center for Ocean Solutions to improve emergency response for oil spills, following the 2010 Deep Water Horizon spill in the Gulf of Mexico. The team interviewed over 100 stakeholders, then facilitated a workshop to define the problem, target outcomes and solution criteria. They generated over 100 potential ideas, prototyped 10 of them, then tested the final solution: A Science Action Network, linking experts to government planning and response agencies through Regional Response Teams to coordinate and streamline scientific input for decision-making. The final solution reflected a deep understanding of the system achieved through mapping.

4 "That's our North Star":
Defining and pursuing a shared goal

The most important element of any systems-change initiative is a shared agenda which unites all stakeholders around a common goal. This "North Star" can be a broad aspirational vision, a specific quantitative goal, or both. It can be as focused as a quantitative, time-bound goal or as vague as a shared concern. Regardless, it must be clearly articulated and reflect the buy-in of all stakeholders across the initiative. It serves as a compass to inspire broad networks of stakeholders, motivate them to align and build collaborative efforts, and guide them in developing joint action plans. The progress of the systems-change initiative can then be measured against this goal.

For the **We Mean Business Coalition**, pushing for a 1.5 – 2-degree target in the Paris Agreement served as the North Star that drove its vigorous advocacy, commitment-building, and partnership development efforts. The **Better than Cash Alliance**, co-founded by leading financial companies, donors and UN agencies, defined a more broadly framed goal of accelerating the transition from cash to digital payments to

reduce poverty and drive inclusive growth. The **Scaling Up Nutrition Movement** works toward a vision of a world
without hunger and malnutrition. **The King's Fund**, a
UK-based charity, supports stakeholders working toward
system-wide change in the health sector, including through
the development of Systems Leadership."



"To Go Far, Go Together": Building powerful multi-stakeholder coalitions

An often-quoted African proverb says that "If you want to go fast, go alone; if you want to go far, go together."

System change initiatives have greater long-term success when they involve the buy-in, leadership and contributions of a broad diversity of relevant stakeholders. However engaging and building true alignment and commitment from all stakeholders requires a considerable investment of time and effort. The more divergent viewpoints are involved, the more time it takes to reach consensus – and the more issues are likely to arise as work proceeds. Building and managing large, diverse alliances is labor-intensive and often difficult. However it can also be hugely rewarding given the extraordinary strength of multiple weak ties.

A closely related saying is "start slow to go fast." Given the transaction costs of building diverse coalitions, it can be tempting to shortcut or simplify the process by engaging a smaller, more homogeneous group of "champions" to jump-start an initiative, with a goal of engaging other stakeholders later. But the near-term gains in speed and efficiency can generate risks and costs in the long term, unless the early champions are genuinely committed to making early-stage investments in broadening engagement.

Stakeholders are unlikely to buy into an agenda that has already been defined if they feel it does not reflect their viewpoints and priorities. In fact, they may actively criticize such an agenda for excluding them or their constituents, which can significantly affect the credibility, viability and impact of the initiative. In 2012, the then-G8 launched a **New Alliance for Food Security and Nutrition** with substantial investment commitments by companies, governments and donors. The initiative was conceived and launched within 5 months, engaging an impressive array of



African and global leaders. However the intensive focus on securing investment commitments allowed little time for discussion with farmer leaders and civil society organizations, who subsequently criticized the initiative. In 2014, the launch of a large-scale **Global Alliance for Climate-Smart Agriculture** was challenged by the release of a "Rejection Letter" signed by over 100 civil-society groups stating that their concerns with the Alliance had not been adequately addressed. The Alliance subsequently went through substantial recalibration and restructuring to address these concerns.

The lesson learned is that shortcuts don't work when it comes to building genuine multi-stakeholder buy-in to a shared agenda. This cannot be over-emphasized. The good news is that the challenging work of building a shared agenda at the start pays off substantially in the long term. Multi-stakeholder involvement can create not only broader support, but a more robust strategy reflecting the full array of stakeholder knowledge and ideas, providing a much greater chance of long-term success for the initiative.

6

"We'll find a way": Innovating and Adapting to overcome challenges

Systems change initiatives must continue to evolve, adapt and grow in order to thrive. Thus it is important for Systems Leaders to remain flexible and agile, adapting to new opportunities and challenges as they arise. It is also important to build and anchor new capacity in the system as the initiative develops, to capture and continue the benefits of the initiative.

The complexity and long timeframes of systems-change initiatives mean that challenges and setbacks are inevitable. The question is not whether these will occur, but how the network will react to them, adapt and course-correct when necessary. Systems Leaders who expect challenges and see them as opportunities for innovation, learning and growth are more likely to survive and thrive.

One common setback in multi-stakeholder alliances involving governments is a change in political leadership. System-change initiatives can benefit greatly from strong

political leadership -- however when a government champion leaves office, their successor may not embrace the initiative. Mexico's **VIDA** initiative, founded in 2011 by the Secretary of Agriculture and a group of local and global stakeholders, faced such a challenge. Partners worked vigorously to build relationships and secure the support of the new administration, even rebranding the initiative to better reflect the government's priorities.

When it comes to meeting challenges with innovative solutions, the multi-stakeholder diversity of a systems-change alliance can be an enormous asset. A diverse alliance has a broad array of knowledge, assets, capabilities, ideas and connections that they can leverage to solve problems jointly. It has flexibility – so that if one stakeholder drops out or undergoes a crisis, others can work to bridge the gap. Diversity also helps to build resilience in the system and strengthens the ability of key initiatives to survive disruptions and setbacks.



"I can make a difference": The power of individuals in complex systems

One of the remarkable aspects of systems-change initiatives is that they can dramatically multiply the impact of individual people and organizations. And by nature, they are non-hierarchical – engaging diverse individuals and organizations on a more equal footing. Taken together, these dynamics mean that any individual, regardless of their position, can have an outsized influence on the initiation and progress of a systems-change initiative. Many systems-change initiatives trace their origin stories to one person, or a small group, who initiated a broader conversation and built a movement. And as such initiatives develop, individuals are crucial to every aspect of their progress – defining visions, shaping strategy, committing to and delivering action, building relationships, and troubleshooting problems.

The power of individuals within alliances is a doubleedged sword. On the one hand, individuals can move entire networks. On the other, networks and their member organizations can become dependent upon those specific individuals. A highly motivated individual can often persuade their company or organization to engage in and



contribute to a systems-change initiative. But whether their organization's involvement continues beyond their tenure is the key question. A major determinant is whether the initiative's value to the organization – in business or political terms -- has been clearly demonstrated and recognized. If so, there is a greater chance that it will be incorporated into the organization's core operating model and carried forward; if not, it may die when the principal champion departs.

Individual Systems Leaders who are coordinating an entire multi-stakeholder network of activity are among the greatest assets and the greatest vulnerabilities to the network as a whole. Highly motivated Systems Leaders can drive enormous progress within their organizations and across a network of others. However if the network is overly reliant on one person, their departure can be a significant setback. Here again the diversity of systems-change networks can serve as an asset for risk management and resilience – the more individuals who serve in coordinating roles, and the more that participating stakeholders build connections to each other, the less reliant the initiative will be on a central coordinator.

The **Philippine Young Water Professionals** (PYWP) was founded in 2016 by six colleagues who saw a need for a fundamental change in the approach to water management in the Philippines. While traditional water managers who viewed water as a resource to be extracted and managed for urban and agricultural use, PYWP encouraged a systemic view of the importance of water in reaching all of the SDGs. The six members fanned out to address convenings of water utility managers, encouraging them to engage youth and recognize the linkages between water and health, food, ecosystems, infrastructure, and natural disasters. The group has grown to over 30 young professionals advocating this approach and has been invited to share their approach with a forum of young government leaders in the Philippines.

8

"We need coordination": Developing new ways to support collective action

Coordinating the diverse, large-scale networks of stakeholders that often form around systems-change initiatives requires investment of time, collective will and facilitation skills.

Networks often are informal or self-organizing in their early

stages, then grow to a scale and level of complexity that requires more formalized support. Often an early-stage volunteer coordinator will become overwhelmed as the initiative grows, sparking the recognition that more resources are needed. Systems Leaders can avoid this step by starting to mobilize and plan for dedicated coordination capacity at the start of a systems-change initiative. At the same time, developing a formal coordinating and governance structure too early in the process may constrain innovation and impose transaction costs on a fledgling network. One solution is to develop coordinating capacity in stages, starting with informal and flexible arrangements.

Coordinating teams can take diverse forms, depending on the nature and needs of the network, ranging from the designation of a small secretariat unit within an existing organization to the establishment of an independent secretariat. Country initiatives within the New Vision for Agriculture initiative took different approaches – Mexico, India and Vietnam had volunteer coordinators for several years before establishing formal secretariats; whereas Tanzania and Indonesia established independent secretariats early in the process. The **2030 Water Resources Group's** coordinating team was incubated at the World Economic Forum before a more formalized secretariat was established at IFC.

Most large, global multi-stakeholder initiatives have well-established secretariats, funding and governance structures – for example GAIN, the SUN Movement, and Every Woman Every Child. System Leaders can draw from well-established best practices for such secretariats to set up such structures with a minimum of transaction costs. Resourcing for such coordinating units can come from donors and/or from partnership fees of participating organizations. Establishing a governance structure that reflects the multi-stakeholder composition of the network is key for credibility and effectiveness. A Secretariat Toolkit developed by the New Vision for Agriculture initiative describes options and good practices for establishing a partnership secretariat.³²

Coordinating teams play a vital role as trusted facilitators of the systems-change effort. It is important for members of these teams to embody the Systems Leadership skillset and mindset, and to demonstrate and uphold the shared values of the network they represent.



9

"Wow! Change is happening": Recognizing and tracking movement

In addition to maintaining momentum and evolving, system change initiatives are expected to deliver results. It is easy for a large-scale alliance to get bogged down in the complexity of its activities. Systems Leaders can help keep the alliance focused on the North Star goal that it is pursuing. Demonstrating tangible impact, ideally at scale, is the outcome that most participants are working to deliver. Participants can better pursue this aim if their goals, and the measurement frameworks to track them, are clearly defined and agreed from the start.

Systems-change initiatives may produce outcomes that go beyond the initiative's original goals and include unexpected or intangible developments – triggering policy change, behavioral or mindset shifts, or changes in market conditions. Another powerful yet intangible effect of systems change centers around changes in the relationships among stakeholders – such as increases in trust, collaboration, and investor confidence. In that way the process of the initiative – including facilitating ongoing collaboration, innovation and learning – becomes a central driver of the development of solutions and the transformation of the system.

Many initiatives build momentum gradually for years before seeing major results, whereas others achieve near-term results or "quick wins." In Southeast Asia, the **Grow Asia** partnership was developed over several years based on the experience of national-level alliances in the region, before being formally launched in 2015 by the World Economic Forum in collaboration with the ASEAN Secretariat. As of 2018 Grow Asia was engaging over 500 partner organizations and reaching nearly 700,000 smallholder farmers across five countries. Grow Asia is now working to lay the foundations for impact at scale by supporting country-led action and accelerating innovative digital and financing solutions to transform Southeast Asian agriculture.

In Los Angeles, California the **Move LA** coalition was founded in 2007 to improve LA County's transportation system, creating a shared agenda among business, labor and environmental groups. Led by a longtime civic leader and former mayor, Denny Zane, the coalition aims to "dream

big," building alliances to co-develop improved transit and affordable housing. In its first year, Move LA helped secure passage of a ballot measure that raised \$36 billion for transit improvements. It has had continued success mobilizing public policy and funding toward a long-term vision for the region. The coalition's tagline is "when you're on a roll, keep rolling!"

10

"We're in it together, for the long haul": Taking the Long View of Systems Change

Systems-change initiatives often begin with a great deal of excitement and momentum, then slow down as they encounter the complexities of implementation. Maintaining momentum, commitment and interest among a broad network of stakeholders is a challenge that Systems Leaders must face.

There are several practical strategies that can help address this. The most important is demonstrating progress, to build credibility and enthusiasm among stakeholders and maintain a sense of momentum. Engaging new partners can strengthen the impact or introduce new ideas to an initiative. And creating regular milestones to review and celebrate progress can be highly effective.

The **Reimagine Learning** initiative took a systemic view of the education sector to support the success of vulnerable students – those with learning differences, social emotional learning challenges or trauma. Catalyzed by the venture philanthropy organization New Profit initially with 32 members, the coalition has now grown to over 700 members. They have brought together educators, innovators and philanthropists to develop a deep understanding of the learning process and to reimagine new ways to better serve students' needs, investing over \$35 million in specific programs. The initiative includes an evergreen fund which will evolve its strategy every five years.

The **Global Polio Eradication Initiative** as founded in 1988 as the largest public health initiative in history, and over three decades has vaccinated over 2.5 billion children and reduced the incidence of polio by 99.9%. It continues to work in 29 countries, led by five core partners including Rotary





System change involves shifting the conditions that hold a problem in place.

- SOCIAL INNOVATION GENERATION

International, WHO, UNICEF, the US Centers for Disease Control and the Bill and Melinda Gates Foundation working with a broad array of stakeholders in-country.

System change requires painstaking, intensive, long-term effort. Alliances may come and go, goals will be reached or not, and leaders will make their contributions then move on. In the meantime, systemic challenges persist over time. Issues like climate change, hunger, poverty, and water scarcity are multi-generational. No single alliance or initiative will be able to solve them completely.

Several key success factors of Systems Leadership are relevant to this long-term horizon: Seeing the big picture, developing a diversified and agile approach, and evolving in response to changing conditions. Systems Leaders will be most successful when they see themselves as part of a continuum, as in a relay race. Each individual and alliance can make its contribution, and hand the baton to others to take forward and improve upon. A mindset of humility and continuous learning, as well as unwavering commitment to the public good, can underpin such an approach. Creating a pipeline of new and emerging Systems Leaders is also highly important to continue and build upon the approach.

VI Mindsets and Behaviors of Individual Systems Leaders

Systems Leadership involves learning to think and act in ways that are substantially different from traditional hierarchies and change models. Systems Leaders must inspire in both themselves and others a comfort level with inquiry, learning, and collaboration with new partners.

Over time, the qualitative aspect of the Systems Leadership process (the "how") is just as important as the concrete action (the "what"). Mental and emotional elements like trust, respect, and openness have powerful effects over time on individual mindsets as well as the interactions between stakeholders – and thus the functioning of the system itself.

Participants and leaders of systems-change initiatives must develop mindsets and behaviors that help to cultivate, guide and maintain the commitment and goodwill of the network. These essential Systems Leadership behaviors and mindsets include:

- Keep an Open Mind: Avoid predetermining the answers and let go of preconceptions. Approach and engage with a true learning mindset to enable and encourage new perspectives and innovations.
- Curate New Conversations: Create and enable breakthrough moments in multi-stakeholder dialogue by convening the right mix of stakeholders, providing trusted and skilled facilitation, framing big-picture challenges, encouraging visionary aspirations.
- Cultivate Shared Power: Adopt a servant leadership mindset and approach; encourage all stakeholders to give generously to the shared mission. Cultivate and reinforce championship by a deliberately diverse set of stakeholders within the network. Recognize the role of traditional power structures, and seek a balance between harnessing the influence of traditional authorities and creating new and more equal leadership by empowering other stakeholders.

- Encourage Innovation through Co-Creation: Enable and harness the magic of co-creation through both leadership dialogue to set new directions or commitments; and practitioner co-design to define innovative solutions and projects.
- Harness your Passion: The most effective Systems Leaders have a strong emotional commitment and connection to both their mission and their stakeholder network. They exhibit passion for the issues, trust and respect for the stakeholders, and commitment to work collaboratively and with integrity. By demonstrating and living these values and behaviors, the Systems Leader inspires trust and similar behavior by others in the network. This helps establish shared norms and principles within a highly diverse network, which stakeholders will then uphold and enforce among themselves.
- Demonstrate your Commitment: The breadth, complexity, and long timeframes of systems-change initiatives can be taxing for individuals, institutions and networks. Systems Leaders can help maintain momentum by demonstrating continued commitment and enthusiasm, keeping the network focused on its goals, and highlighting and celebrating progress. They can also help the network maintain confidence in the face of challenges that arise, by facilitating solutions.
- Cultivate personal capabilities: Many Systems
 Leaders expand their perspectives and skills through the
 experience of engaging in systems-change initiatives.
 Investing in reflection and self-development at the
 individual level can help Systems Leaders perceive and
 encourage the best abilities of others.

Your work as an enabler is not about you. If you are seeking respect and recognition you will be seen as not working in the best interests of the whole system. It will also lead you towards specific approaches that may deliver more immediate impact, where at times part of the art is to slow down, hold the ambiguity and allow events to take their course. – JOHN ATKINSON, EMMA LOFTUS AND JOHN JARVIS

The mindset, principles, and skills of the individual Systems Leader are essential to their success in facilitating systemic change. This ranges from practical skills in facilitation, strategy development and communication to personal and behavioral qualities such as humility, listening skills and resourcefulness. It also includes challenging one's own mental models and habits of thinking.³³ A certain humility and commitment is required for Systems Leaders to maintain a learning mindset, remain flexible in their views and continuously develop their skills over the long term.

Rich City Rides: Enabling community transformation at the local level





Founded in 2012, Rich City Rides is a community organization that works to strengthen public health, environmental sustainability and economic opportunity through bicycling in the city of Richmond, California. Decades of disinvestment, combined with pollution from a major oil refinery, contributed to high rates of unemployment, chronic health problems, and limited transportation access for the city's communities of color.

The organization's founder, Najari Smith, was inspired by personal experience to promote bicycling as an avenue for strengthening physical and emotional health. Through dialogues with Richmond community members, he learned that the younger generation lacked opportunities for healthy activities, but didn't see bicycling as an appealing or accessible option. Popularizing cycling in the community would require multiple interventions – from changing perceptions and increasing access to improving infrastructure.

Through working with city government, regional bicycling coalitions, and local nonprofits, Najari developed deep ties with community leaders and organizations who shared a vision for revitalizing Richmond and recognized the role that bicycling could play. With their support, he founded Rich City Rides as a nonprofit organization, then co-founded the bike shop as a cooperatively-owned business. He cultivated a committed network of staff, co-owners and community volunteers who run programs including:

- Bicycling events targeted to youth and families, with an emphasis on health and self-care. These have engaged over 4000 community members in exploring local greenways and parks.
- Bicycle repair workshops and Earn-a-Bike Apprentice Programs to develop skills, refurbish bicycles and expand engagement among youth;
- Advocacy and action to improve Richmond bicycling and parks, including facilitating community co-design of a new public space, Unity Park, and ongoing park cleanup projects.
- Mentoring youth leaders in local high schools, and incubating young entrepreneurs testing bike-related business ideas such as PediCabs and a mobile bike repair service.

Rich City Rides has both benefited from and contributed to a vibrant ecosystem of organizations working to transform the community. Partner organizations donated space, funding, supplies and expertise to help Rich City Rides get started. In turn, Najari and his team have helped found new organizations and coalitions to address broader issues in the community that Rich City Rides cannot solve alone. These include:

- Cooperation Richmond, an incubator to catalyze and support cooperativelyowned enterprises, addressing the community need for employment, asset ownership and entrepreneurship support;
- Richmond Our Power Coalition, part of a national network which aims to build an inclusive, equitable, green economy led by communities and grounded in racial justice.
 This responds to community needs including affordable housing, clean energy and sustainable food systems.

Najari has served as a System Leader by developing a diverse network of local, regional and national partners to understand the inter-connected challenges of health, environment, economy and racial justice; and mobilizing that network to tackle those issues collaboratively. In describing the ethos that has driven this collaborative work, he said "We all have to win, together. None of us should have to lose."

VII Mainstreaming Systems Leadership: The Way Forward

Systems Leadership offers a set of tools, tactics and strategies that can help address complex challenges such as those outlined in the Sustainable Development Goals. The potential value of applying this approach more broadly is worthy of further exploration. However the approach remains at an early stage of development in terms of having a consistent definition and application, well-tested strategies, widespread adoption, and provable results. Since many Systems Leadership initiatives are less than a decade old, they lack the proof points for demonstrating the long-term value of the approach. Over time, greater efforts are needed to apply and support the Systems Leadership approach, and to study its direct and indirect impacts.

An increasingly vibrant array of Systems Leadership experts, initiatives and practitioners are populating the global landscape, however they not always connected to or aware of one another. Illustrative examples of current actors applying Systems Leadership or systems-change approaches include:

- International organizations including the World Economic Forum, UNDP and others are applying systemschange and Systems Leadership approaches and sharing good practices;
- Global NGOs such as The Nature Conservancy and WWF are applying the approach;
- Academic institutions such as MIT, Stanford, Harvard and Yale are undertaking research, convening researchers and in some cases providing courses;
- Consultancies such as FSG, SYSTEMIQ, 4SD, Phillips Kay Partnership, Wasafiri, The ValueWeb, CoCreative, and others are providing advice and convening support for Systems Leadership initiatives;
- Foundations such as the McConnell Foundation, Omidyar Network and Rockefeller Foundation are playing important convening, piloting and knowledge-sharing roles in the philanthropic sector;
- Multinational companies and business-led networks, such as the World Business Council for Sustainable Development and the Consumer Goods Forum, are starting to address complex challenges through a Systems Leadership lens;

• Systems Leadership organizations are playing essential supporting and capacity-building roles for many of these efforts, through programs run by the Academy for Systems Change, the Presencing Institute and u.lab, the Systems Leadership Institute, Systems Sanctuary, and the Waters Center for Systems Thinking. Training courses are also offered by Stanford ChangeLabs and by the Acumen Fund in collaboration with the Omidyar Network.

More regular and structured engagement among these varied organizations and initiatives will help accelerate knowledge-sharing, learning and capacity building. The development of new platforms to enable experience-sharing, collaborating building and knowledge exchange would be highly valuable.

Experts and practitioners have observed that the Systems Leadership field would benefit from greater alignment, resource-sharing and collaboration.³⁴ The field can also benefit from expansion to engage new collaborators, including universities (to develop case studies and train future systems leaders), international organizations (to develop, disseminate and promote the approach globally), and companies (to demonstrate and advocate the business value of the approach). Existing large multi-stakeholder platforms and alliances are well positioned to adopt and embrace the approach, if they have not done so already. Institutions from diverse stakeholder sectors can play important roles in championing the approach.

A vision for the desired future of Systems Leadership as it relates to supporting the SDGs would include:

- Widespread understanding of the concept and core principles of Systems Leadership among the international community, including global, regional and local leaders;
- Universal access and availability of information, tools and training programs to help develop and strengthen Systems Leaders;
- Robust and systematic evaluation and sharing of experiences and outcomes of Systems Leadership initiatives;
- High-level leadership support for the approach among respected individuals from diverse sectors and regions, clearly embracing it as a tool for empowerment and systems change.

Achieving these goals will require a coordinated effort among proponents of Systems Leadership to further develop, study and refine the approach and encourage its mainstreaming. However the nature of Systems Leadership is that it is not a theoretical or academic construct; it is a strategy and set of tactics to be applied and refined through real experience. As a result, a larger number and diversity of both systems leaders and Systems Leadership initiatives are needed to build critical mass and capture learnings that can benefit the field as a whole.

In conclusion, Systems Leadership shows great promise as a set of tools, tactics and strategies for advancing the 2030 Agenda for Sustainable Development. While it does not offer easy or predictable outcomes, it can help to address the complexity, dynamism and scale of the systemic challenges that underlie the SDGs. Strengthening the practice of Systems Leadership, and expanding its application among the international community, will require an expansion of experiential innovation and learning, training and research programs. Existing and emerging Systems Leaders, both individuals and institutions, can play a vital role by working together in all of these areas to strengthen and accelerate the practice of this approach. The need for collective action and joint problem-solving is more important and urgent than ever.

ANNEX 1: Frameworks for Systems Leadership and Systems Change

Several groups have defined and described the elements of Systems Leadership or systems change. As seen below, many of these are similar or overlapping – suggesting that most System Leaders are encountering and describing similar dynamics and best practices. (Click on titles for weblinks.)

The Dawn of System Leadership

(Senge, Kania & Hamilton)

The role of the System Leader is to foster collective leadership through three core capabilities:

- Seeing the larger system to develop a shared understanding of complex problems, enabling them to work together toward the health of the whole system rather than individual components;
- Fostering reflection and generative conversations to examine underlying assumptions and mental models, hear different viewpoints, and appreciate each other's reality – thus building trust;
- Shifting from reaction to co-creation, based on a shared positive vision of the future, using the creative tension between future vision and present reality to inspire creative new approaches.

True System Leaders pass through a number of "gateways" in their development, including:

- Re-directing attention: Seeing that problems "out there" are "in here" also – and the two are connected
- Re-orienting strategy: Creating the space for change and letting collective intelligence and wisdom to emerge
- Practice, practice: All learning is doing, but the doing needed is inherently developmental

System leaders can develop further by keeping several guidelines in mind, including learning on the job; balancing advocacy and inquiry; engaging people across boundaries; letting go; building one's own toolkit; and connecting with other system leaders.

Academy for Systems Change

Systems Leadership seeks to achieve real and lasting change, working from the levels of:

- Self: Recognizing that we are part of the systems we seek to change
- Team: Interacting productively with, and learning from, others
- Organization: Collaborating across internal stakeholder groups
- System: Working across boundaries to co-create the future.

Harvard Kennedy School Corporate Responsibility Initiative

The Systems Leadership process is comprised of three key components:

- Cultivate a shared vision for change: Understand the system, Identify and engage key stakeholders, and facilitate co-creation.
- Empower widespread innovation and action:
 Align incentives within and across organizations;
 Strengthen individual and institutional approaches;
 and mobilize financial resources.
- Enable mutual accountability for progress:
 Develop clear consultation and feedback mechanisms;
 measure and report on mutually agreed indicators; and establish credible governance structures.

Systems Leadership can be exercised by **Individuals** who can think systematically and act across traditional boundaries; by **Institutions** that operate in ways that benefit themselves and the broader systems in which they operate; and by **Interactive structures** that mobilize, support and coordinate individual and institutional system leaders to accelerate progress.

Wasafiri Consulting

"Systemcraft" – the art of affecting Systems Change – has 5 core ideas:

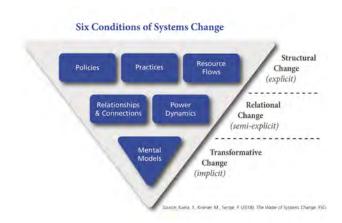
- Build shared understanding: Creating a more complete, current view among different actors, opening insight on who and what is served by the pattern, along with opportunities to influence its outcomes.
- Secure commitment: Aligning goals among those driving change in the pattern and, where appropriate, gaining a mandate from those with governing influence to create momentum toward a positive collective vision.
- 3. **Change dynamics:** Targeting mutually reinforcing interventions to disrupt the pattern and redesign it towards more favorable outcomes.
- 4. **Enable coordination:** Aligning disparate stakeholders to build shared understanding, secure commitment, change dynamics and augment learning in the pattern, either through formal or informal structures.
- Augment learning: Adopting emergent, iterative strategies for learning how the pattern is functioning and evolving, and addressing power imbalances in information flows.

Key aspects of this approach include: Answering "what next?", redesigning patterns, working collectively, working adaptively, influencing at scale, addressing power, and seeking windows of opportunity.

Tips for adopting a SystemCraft mindset include: Being open and curious; embracing ambiguity; accepting that it will be harder and slower at first; and using the aspects of SystemCraft that serve you now.

FSG

In its 2018 report "The Water of Systems Change" FSG defined six conditions of systems change, as seen below.



Omidyar Network: System Practice

The Omidyar Network created a workbook on Systems Practice as a resource for practitioners working on complex problems in any field of social change. The workbook is complemented virtual trainings conducted by Omidyar in collaboration with Acumen Fund .

Theory U and Consciousness-Based Systems Change (Otto Scharmer)

The three key components of "Theory U" involve observing, reflecting and acting.

The five components of "Consciousness-Based Systems Change" include:

- 1. **Co-initiating:** Uncovering shared intention
- 2. **Co-sensing:** Seeing the reality from the edges of the system
- 3. **Presencing:** Connecting to the highest future potential
- 4. **Co-creating:** Crystallizing and prototyping the new
- 5. **Co-shaping:** Growing innovation ecosystems

Reos Partners: Five Ingredients of Success in Systemic Change

Reos Partners, co-founded by Adam Kahane and others, works with stakeholders to create insights, alliances and action for systemic change. They have identified five ingredients for success including:

- A whole-system team. The first prerequisite is a team of influential, insightful actors representative of the system's many facets.
- Skilled guides. Collaboration on problems characterized by overwhelming complexity, confusion and conflict requires expert facilitation.
- A strong container. In order to experiment with new ways of talking and acting, the team needs a structured space to do their work that is suitably set up.
- The right resources. Social, human and financial resources must be available at a scale that matches the scale of the challenge.
- A generative approach. A creative, experimental method that engages team members' whole selves – head, heart and hands – enables breakthrough results.

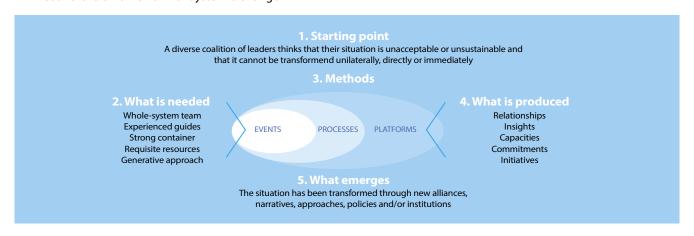
School of System Change

Catalyzed by the UK-based Forum for the Future, the School of System Change seeks to support the emerging field of systems change. It offers "Basecamp" courses to practitioners, based on applying five core capabilities for system change to fieldwork projects conducted with partners.

Five Capabilities for System Change

- Systemic diagnosis Diagnose complex sustainability challenges using systemic approaches
- Strategy design Design system change strategies and interventions
- 3. **Innovation** for impact –Develop and realize innovative solutions that seek to create scalable and systemic impact
- 4. **Collaboration** and engagement seek, initiate, build and facilitate partnerships and coalitions for change
- 5. **Leadership** and learning Learn and lead into a complex and uncertain future

Reos Partners' framework for Systemic Change



Stanford ChangeLabs: System Acupuncture Framework

System Acupuncture involves a philosophical shift as well as a set of practical processes and principles, underpinned by a theoretical basis directed at system transformations in scaled, complex, multi-criteria, multi-stakeholder, and multi-temporal challenges. Systems Acupuncture is comprised of an integrated set of six elements:

- Systems Leadership: Leadership that creates the conditions and drives coordinated action towards large scale systems transformation. It involves enabling distributed leadership.
- 2. **Systems Innovation:** Designing effective interventions for self-propelling, scaled and non-linear systems change, through:
 - a. Understanding the underlying system dynamics
 - b. Identifying acupuncture points
 - c. Shaping a systems-based theory of change
 - d. Designing intervention pathways
 - e. Shaping actionable and synergistic portfolios of systems-change interventions
- Systems Platforms: Structuring platforms that engage diverse stakeholders, generate action, and redirect flows of resources.
- 4. **Systems Resources:** Redefining resources as all potential elements or forces that could be created, directed, repurposed, or sequestered to propel the system change and cause the system to stabilize in desirable states.
- Systems Action: Catalyzing, coordinating and sustaining action by a diverse set of stakeholders to create desired shifts in the system dynamics.
- System Measurements and Navigation: Designing measurement systems that track the theory of change with tight feedback loops between sensing of changes in system dynamics and navigational decisions.

Linda Booth Sweeney: 12 Principles of Living Systems

Living Systems expert and author Linda Booth Sweeney defined 12 Principles of Living Systems:

- **Interdependence:** A relationship in which each partner affects and often needs the other.
- System Integrity: What a system has when all the parts and processes essential to its ability to function are present.
- Biodiversity: The variety, complexity, and abundance of species that, if adequate, make ecosystems healthy and resilient
- Cooperation and Partnership: The continual process in which species exchange energy and resources.
- Rightness of Size: The proportions of living systems their bigness or smallness and their built-in limitations to growth—that influence a system's stability and sustainability.
- Living Cycles: A cycle is a circular process that repeats over and over, frequently returning to where it began.
 The water, lunar, sleep and other cycles sustain life, circulate resources, and provide opportunities for renewal.
- Waste = Food: When waste from one system becomes food for another. All materials in nature are valuable, continuously circulating in closed loops of production, use, and recycling.
- Feedback: Circular processes that create growth or decay by amplifying change (reinforcing feedback) or, foster stability by counteracting or lessening change (balancing feedback).
- **Nonlinearity:** a type of behavior in which the effect is disproportionate from the cause.
- **Emergent Properties:** Behavior that arises out of the interactions within a specific set of parts: the health of an ecosystem or a team's performance, for example.
- Flux: The continual movement of energy, matter and information that moves through living systems. Flux enables the living or "open" system to remain alive, flexible and ever-changing. The sun, for instance, provides a constant flux or flow of energy and resources that feeds all living organisms.
- **The Commons:** Shared resources such as air, water, land, highways, fisheries, energy, and minerals on which we depend and for which we are all responsible.

ANNEX 2: CLEAR Framework Self-Assessment Questions for Systems Leadership Initiatives

Drawing from the CLEAR framework outlined in this paper, stakeholders engaged in Systems Leadership initiatives can use the following questions for reflection and discussion to assess progress and consider opportunities for strengthening their approach.

Questions for Reflection: Convene and Commit

CONVENE

Have we engaged a diverse and representative group of the relevant stakeholders in a constructive joint discussion?

Have we provided every stakeholder with the opportunity to share their perspectives?

Did we hear and listen to those who are politically, socially or economically marginalized, and those who serve as critics and challengers? Did we provide a safe and respectful space for all voices?

Did the conversation generate new ideas, perspectives or stakeholder dynamics – or did it repeat established messages and patterns?

What did we learn from this discussion which we could build on or improve next time?

COMMIT

Have we demonstrated a commitment to addressing an issue of shared concern? How has that commitment been expressed? How and by whom?

Have we defined a shared vision or desired outcome which reflects the aspirations of all stakeholders?

Have we defined specific goals or desired outcomes that we will work jointly to achieve?

Do we have an understanding of what each stakeholder could contribute to realize our shared agenda?

Which stakeholders might have concerns about the shared agenda, and how can those concerns be addressed?

Questions for Reflection: Look and Learn

LOOK

Have we mapped, explored or discussed the nature of this system in all its dimensions?

Have we drawn upon existing research, data, knowledge and expertise relevant to this system?

Have we identified all the stakeholders relevant to this system?

Have we mapped out the existing major initiatives that are currently active in this system?

What knowledge, information or perspectives are missing? How can we find or generate that knowledge?

LEARN

What have we learned about the dynamics of how this system operates? What are the benefits and downsides in the way the system is currently operating?

What have we learned about how the stakeholders interact (or don't interact) in this system?

What are the greatest threats, problems and challenges in this system, and what implications can be drawn from that?

What is working well or generating positive outcomes in this system, and what insights can be drawn from that?

Questions for Reflection: Engage and Energize

ENGAGE

Are we engaging with a diverse and representative array of stakeholders and perspectives relevant to this issue, even when it is difficult to do so? If not, how can we engage additional voices and perspectives?

Do all participating stakeholders feel meaningfully engaged and valued?

Are we enabling continuous engagement, communication and collaboration among participating stakeholders? If not how can that be improved?

ENERGIZE

How can we motivate and inspire stakeholders to deliver on ambitious commitments?

How can we encourage new forms of innovation and collaboration among these stakeholders?

How can we maintain and build inspiration and momentum among our network of stakeholders?

Questions for Reflection: Action and Accountability

ACTION

Are we exploring new ideas and encouraging innovation? How could we strengthen that further?

Are we developing new collaborations or partnerships within our network?

Are we willing to take risks, or are we playing it safe? How and why?

Are we translating ideas and commitments into action by forming multi-stakeholder teams, developing clear action plans, defining roles and responsibilities, and monitoring/sharing progress?

Have we considered what coordination structure – formal or informal – will best enable our network to deliver on its commitment to action?

ACCOUNTABILITY

Have we agreed on clear and measurable goals at both the project and the network level?

Have we defined who will do what to reach our shared goals?

Have we defined how we will track and share progress in a transparent, accurate and trustworthy way – at both project and network levels?

Have we discussed how we will hold one another accountable – either formally or informally – for delivering on commitments?

Have we defined a transparent, representative, well-managed governance structure for our collective efforts?

Questions for Reflection: Review and Revise

REVIEW

Have we implemented a measurement framework, and are we regularly sharing and reviewing its results?

Are we truly inviting, exploring and hearing qualitative feedback from all stakeholders?

Are we sharing our learnings among the network and beyond?

REVISE

What have we learned from our ongoing measurement and consultations?

What adjustments should be made to address the progress or feedback to date?

Have we defined an approach to address stakeholder grievances or opposition?

Have we identified opportunities to increase the value or scale the impact of the initiative?

ANNEX 3: List of Reviewers

The authors gratefully acknowledge the thoughtful and substantive input and feedback provided by the following expert reviewers.

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About the Corporate Responsibility Initiative (CRI)

The Corporate Responsibility Initiative (CRI) at the Harvard Kennedy School's Mossavar-Rahmani Center for Business and Government (M-RCBG) is a multidisciplinary and multi-stakeholder program that seeks to study and enhance the public contributions of private enterprise. The initiative explores the intersection of corporate responsibility, corporate governance, and public policy, with a focus on analyzing institutional innovations that help to implement the corporate responsibility to respect human rights, enhance governance and accountability and achieve key international development goals. It bridges theory and practice, builds leadership skills, and supports constructive dialogue and collaboration among business, government, civil society and academics.

Founded in 2004, the CR Initiative works with and is funded by a small Corporate Leadership Group consisting of global companies that are leaders in the fields of corporate responsibility, sustainability or creating shared value. The Initiative also works with other leading corporate responsibility and sustainability organizations, government bodies, non-governmental organizations, foundations and companies to leverage innovative policy research and examples of good practice in this field. Sources of funding are listed on the Initiative's website.

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