CO-CREATION FOR SUSTAINABILITY

The UN SDGs and the Power of Local Partnerships

CHRISTOPHER ANSELL
EVA SØRENSEN
JACOB TORFING

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Co-Creation for Sustainability: The UN SDGs and the Power of Local Partnership

BY

CHRISTOPHER ANSELL
University of California, USA

EVA SØRENSEN
Roskilde University, Denmark

And

JACOB TORFING
Roskilde University, Denmark

United Kingdom – North America – Japan – India – Malaysia – China

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Preface

We have written this book out of a sense of urgency and hope. The threat to the sustainability of our natural and socioeconomic environment is now dire. Yet we also find a sense of hope in the fact that 193 United Nations member states came together in 2015 to support the Sustainable Development Goals (SDGs), establishing a strong agenda for tackling our most difficult global challenges. We have a long way to go to achieve the SDGs and we are now almost halfway to the Agenda 2030 finish line. Rather than becoming disillusioned, however, the gap between current results and the ultimate goals should motivate us to rethink and adjust our strategies and methods. Finding great merit in the partnership and collaboration values inscribed in Goal 17, this book advances cocreation as a strategy for accelerating our efforts to meet the goals. Cocreation can help to harness the power of local partnerships for achieving the ambitious 2030 Agenda.

The world is a much different place today than when we initially imagined this project. The COVID-19 pandemic has raced through the world and caused hardship and turmoil for millions of people. The pandemic has been detrimental to the implementation of the SDGs, derailing ambitious projects all over the world. Yet there are also hopeful reports that COVID-19 has brought people together in new ways and accentuated their understanding that the world confronts common challenges that call for united action. As the pandemic hopefully wanes, the agenda set out in this book becomes even more timely and relevant.

This book itself results from a sustained effort at cocreation that has spanned the world and bridged between academics and practitioners. Throughout this project, we consulted three experts – Pedro Conceição, Priya Gajraj, and Jens Wandel – affiliated with the United Nations. They have been a source of inspiration and ideas about how to implement a cocreation agenda. Pedro, Priya, and Jens have all provided comments that have guided the planning of book and greatly improved the content of individual chapters. We are grateful for their generous inputs, but note that the three authors take sole responsibility for the ideas and arguments put forth in this book.

This book is written with a specific audience in mind: changemakers around the world who take upon themselves the mission of mobilizing citizens and stakeholders to cocreate innovative SDG solutions. The book is intended to be read and utilized as a guidebook stimulating critical reflections on how to design and use cocreation as a lever for addressing the challenges of global sustainability. We hope that the book can be useful for individual changemakers, as well as for

the purpose of training potential cocreators in the noble art of doing together what individuals cannot do alone.

We extend our thanks to our editor David Mulvaney at Emerald for his support and understanding during the writing of this book. Thanks also to Head of Department Peter Kragelund, Department of Social Sciences and Business, Roskilde University for comments to several chapters and support for the Golden Open Access publishing that makes the digital version of the book freely available to everyone everywhere. We also thank the Peder Sather program at the University of California, Berkeley, for project support.

On a final note, we are pleased that a large research grant from the Independent Research Fund Denmark will allow us to continue the work that we have initiated in this book and contribute to the growing research on how collaborative governance can support the realization of the SDGs. We are looking forward to collaborating with people all over the world to further explore the factors that may support the cocreation of the green transition.

Chris, Eva, and Jacob
Berkeley, USA, and Roskilde, Denmark
January 2022

Chapter 1

Cocreating the UN's Sustainable Development Goals

Abstract

This introductory chapter points to the need for sound and critical reflection on how to mobilize public, private and third sector actors, facilitate collaboration in partnerships and networks, and cocreate SDG solutions that are at once innovative, effective, and democratic. It spells out the aim of the book, which is to show how Goal 17 on partnerships can be used as a lever for securing global transformation toward socioeconomic and environmental sustainability. It explicates the basic argument that cocreation provides a promising strategy for advancing goal attainment by mobilizing competent, engaged, and knowledgeable stakeholders, stimulating innovation and ensuring broad-based support to solutions that make a difference. Finally, it briefly presents the content of the book and explains its intended usage.

Keywords: United Nations; Millennium Development Goals; Sustainable Development Goals; Goal 17; partnerships; networks

How to Work Together to Achieve the SDGs

When in 2015, the United Nations unanimously agreed on the Sustainable Development Goals (SDGs), it defined an ambitious global agenda for everyone committed to saving the planet while promoting economic prosperity, human development, and social justice. The task of achieving the 17 interconnected goals for global sustainability is as immense as it is urgent. At times, it may even seem overwhelming and beyond our reach. However, if we all work together, share our resources and ideas, build on our mutual strengths, inspire and encourage each other and build resilience, we have a good chance of succeeding and jointly creating a sustainable future in which humans, communities, and regions can blossom within the limits set by the natural environment.

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The idea of bringing government actors, private enterprises, civil society organizations, and local citizens together in trust-based, constructive, and transformative collaboration is challenged in many parts of the world. In some countries, public sector organizations are weak and failing while elsewhere they have earned themselves a bad reputation and are looked at with great suspicion by private social and economic actors. There are also countries where well-established bureaucracies and strong autocratic political leaders have little inclination to share power with private actors, local communities, and NGOs. These barriers are regrettable because they prevent the production of public-private synergies and the formation of partnerships that can bring about the transformations that the world desperately needs.

Calling upon all actors to reach out and join forces in the name of global survival, this book aims to make the strongest possible case for the formation of collaborative and synergistic partnerships in all parts of the world. This ambition is nurtured by the many examples of mutual advantage obtained through the gradual development of collaborative relationships and joint solutions. To illustrate, the Food Waste Warrior in Malaysia is established as a social enterprise linked to a central government agency (United Nations SDG Partnership Platform, 2021). It partners with local restaurants, farmers, local government, universities, and NGOs to divert food waste away from landfills and turn it into high-quality fertilizing for biodynamic farms producing healthy foods for local people. Creation of a circular economy for healthy food helps restaurants dispose of their food waste, people to get access to healthy food, local government to develop standards for handling food waste, and the national government to improve public health and restore degraded land and soil. Hence, collaboration turns all participants and the environment into winners.

This example is not unique. All around the world people are heeding the call to act locally to solve problems and challenges with a global reach and significance. Most of them recognize the need for cross-boundary collaboration. Johan in Norway seeks to promote the corporate social responsibility of his firm by inviting other local actors, including the municipal waste department, to collaborate on a new recycling project. Alenka in Slovenia is running a voluntary shelter for homeless people and wants to engage a broad range of public agencies in building new shelters and offering better services to the homeless. Miguel and Maria in Spain are working to create a network of people who are willing to assist the local health authorities during the next pandemic. Eduardo in Brazil is a public forestation planner aiming to mobilize local firms and communities to protect the rain forest and promote sustainable forestry. Carl is chairman of the Seattle Fishermen's Association and works hard to create a local alliance for a sustainable fishery. Sylvain in Benin leads a group of farmers that seeks support from various government programs and international donor organizations in order to spur organic and sustainable farming. Adinda in Indonesia leads a local women's group aiming to reduce child mortality in poor neighborhoods by providing better information and access to public health clinics. Hiroshi and his friends in Japan are university students and have recently formed a green student movement aiming to reduce CO_2 emissions from the

University of Nagoya and the local neighborhood. Amahle in South Africa is a regional environmental officer who works with local communities and some international NGOs and philanthropists to protect the habitat of endangered animals. Vladimir in Russia is organizing shipyard workers across the region in order to secure livable wages and a safer working environment. Mrs. Ann Taylor in Ireland is a local councilor aiming to fight child obesity by fostering collaboration between local schools, supermarkets, fitness clubs and civil society organizations.

For all these local endeavors to come to fruition and have a real impact on one or more SDGs, these local changemakers will have to make a series of important decisions about how to define the problem they are addressing, whom to involve in creative problem-solving, how to spur collaboration and collective action, and how to measure progress toward goal attainment. They may discuss their plans and strategies with friends, colleagues, and allies and distribute important responsibilities for joint efforts to other actors. They may also draw on valuable experience from other similar initiatives in the own region or country, or perhaps from abroad. Still, initiating and driving local processes of collaborative governance, which aim to engage a plethora of public, private, and third sector actors in the creation of solutions that have public value and are valued by the public, is a daunting task that calls for critical reflection on the part of local changemakers. Many things can go wrong when it comes to collaborative governance due to either bad or ill-informed decisions or unacknowledged conditions for action. Thus, since failure is often unaffordable in the face of urgent problems, we need to reduce the risk of failure by carefully thinking through the different steps in the collaborative process in order to secure desirable outcomes.

In order to stimulate and facilitate sound and critical reflection on how to mobilize relevant and affected actors in a joint effort to reach one or more SDGs, this book brings together state-of-the-art research and practical learning from local cases from around the world. It provides a systematic guide enabling local changemakers – whether public or private – to make well-informed and context-sensitive decisions about how they can engage local actors in joint efforts to cocreate public solutions to pressing problems. Spurring reflection on how to mobilize local actors, facilitate collaboration, and produce public solutions that are at once innovative, effective, and democratic is a key condition for accelerating the endeavor to achieve the SDGs by 2030.

The Aim of the Book

This book aims to support and inspire the reflections of public employees, private firms, NGOs, donor organizations, philanthropists, project managers, local citizens, and other relevant changemakers who aspire to cocreate solutions to the pressing problems and challenges that confront our social and natural environment. It addresses a broad set of issues that are relevant to public and private actors seeking to sponsor activities, convene partners, facilitate collaboration,

catalyze disruptive change, and have a collective impact on the future. It combines research-based reflections on the tasks that local sponsors, conveners, facilitators, and catalysts must perform in order to spur the cocreation of local solutions to global problems with empirical examples from different parts of the world that demonstrate how these tasks can best be accomplished in practice under varying conditions.

The book is neither a practical manual prescribing action, nor a scholarly review of the literature on cocreation in the field of sustainable development. Rather, it provides a reservoir of practical and scientific knowledge and advice that active and responsible changemakers around the globe can interrogate, learn from, and purposefully adapt in order to accomplish their mission of making things better and saving the world through collaborative endeavors aiming to produce innovative public value outcomes. It is our hope that people will dive into this pool of knowledge, critically compare the points and arguments with their own experience and situation, and pragmatically adapt and deploy new insights to spur collaborative action and achieve results.

Most books focusing on the SDGs recognize the need for cross-boundary collaboration. Nevertheless, the burgeoning SDG literature tends to focus either on how to achieve a particular goal or how a particular institution or actor can contribute to realizing one or more SDGs. Hence, many books take a sector-specific approach to advancing the SDGs, and provide in-depth studies of the problems and available solutions within a particular area such as forestry, climate, health, education, poverty or justice. Another line of inquiry looks at how actors at multiple levels can contribute toward the SDGs. Some books look at the strategies and efforts of the UN system, the international donor community and global society, while other books look at the actual and potential contribution of financial institutions, private firms and industries, state institutions such as courts, police and regulatory agencies, local government and vulnerable social groups such as children, women, smallholder farmers, migrants and those living in extreme poverty. This book takes a different approach by focusing on how all these different actors can be brought together in fruitful collaboration to achieve any of the interconnected SDGs. Hence, by focusing on partnerships as a lever of change, the book has relevance for all actors, whether public or private, local or global, or sector-specific or cross-sectoral. Moreover, while many SDG books are focusing on the Global South, this book has a global relevance as it is written for all those people around the globe who aspire to use multiactor collaboration as a tool for producing innovative solutions that can help to make the world a better place.

The Argument in a Nutshell

The UN's SDGs not only set an agenda for global problem-solving, but also provide an important recommendation for how public actors can produce solutions and make a real impact in and through the mobilization of societal actors.

In fact, Goal 17 points to the central importance of partnerships, networks, and multistakeholder collaboration for bringing together a broad range of public, private, and civil society actors in realizing the first 16 goals. This strategy is spot on in a world where knowledge, resources, and governance capacities are widely distributed across an array of government agencies, private enterprises, civil society organizations, political activists, local communities, national development agencies, and international NGOs. Since it is unlikely that one single actor possesses all the resources and ideas needed to make things happen and fulfill one or more SDGs, it makes good sense to rely on the collaborative advantage of a broad range of public and private actors who will often be able to do things together that none of them are capable of doing on their own (Huxham & Vangen, 2013). To illustrate, the devastating Corona pandemic has clearly demonstrated that governments and public health systems from Timbuktu to Tokyo and New York cannot fight this lethal virus alone, but need to mobilize citizens, volunteers, civil society organization, private companies, international aid organizations, etc. to help those who are infected and to eventually control the outbreak.

So, in a nutshell, our argument is that Goal 17 on partnership is a lever of change since – in our interpretation – it insists that public, private, and third-sector actors around the world should not seek to go into it alone, but instead strive to bring together a broad range of actors in cross-boundary collaboration through networks and partnerships that provide arenas for creative, legitimate, and effective problem-solving. Governance based on collaborative interaction in networks and partnerships enables local actors to benefit from collective wisdom and swarm intelligence. We are often wiser, more resourceful, and more courageous when we are doing things together rather than relying on our own limited cognitive and organizational capacity.

This book offers a particular reading of Goal 17. Hence, we want to push the recommendation of cross-boundary collaboration a little further by arguing that collaborative governance aiming to involve public, private, and third sector actors in creative problem-solving paves the way for involving an even broader set of actors in cocreation of innovative public value outcomes. Hence, our bold claim is that the advancement of cocreation as a collaborative problem-solving strategy can breathe new life into the global efforts to achieve the SDGs. The interim reports on the SDGs submitted by all UN membership countries in 2019 suggest that the glass is half empty rather than half full. Presently, we are halfway through the process of implementing Agenda 2030, but there is a long way to go before fully achieving the SDGs. This Agenda is not only tremendously ambitious, but it has been interrupted by the necessary efforts to fight the Corona pandemic. Cocreation provides a promising strategy for getting back on track and advancing goal attainment by mobilizing competent, engaged, and knowledgeable stakeholders, stimulating innovation and ensuring broad-based support for solutions that make a difference.

Overall Content of the Book

The first two chapters of the book carefully explains the basic argument we want to advance. Hence, *chapter 2* briefly explains the emergence and content of the SDGs and proceeds to discuss the significance of local action for achieving them, and *chapter 3* explains why collaborative governance in general and cocreation in particular provides an attractive and promising strategy for local actors aiming to fulfill one or more SDGs. Together, these opening chapters prescribe a simple cure for the dire problems and immense challenges that our social and natural environment faces: build platforms and arenas that attract and involve relevant and affected actors in collaborative processes that spur creative problem-solving, build common ownership over new and bold solutions, and facilitate monitoring and continuous improvement of results.

To support the critical reflection of local actors aiming to pursue one or more SDGs through local collaboration in networks and partnership, the next 10 chapters identify and discuss the key aspects of the process of local cocreation of global SDGs:

Chapter 4 reflects on the translation of global SDGs to local contexts that differ in terms of the urgency of the problems and challenges at hand and the political and socioeconomic conditions for solving them. If local actors fail to recognize the relevance of one or more SDGs, the formation of network and partnerships is impossible. Hence, translation work that aims to connect global goals with local problems is highly important. Cocreation offers a strategy for the 'localization' of the Global SDGs.

Chapter 5 explores how government actors, international organizations, and other relevant sponsors can support the formation of platforms and arenas for cocreation of local SDG solutions. Platforms are relatively permanent meeting places that attract relevant and affected actors and facilitate the formation of collaborative arenas in which cocreation can emerge and flourish. Platforms and arenas are institutional designs that help scaffold processes of multiactor collaboration and cocreation of public value outcomes.

Chapter 6 raises the pertinent question about how to convene local actors and motivate them to participate in cocreation of new solutions to old or emerging problems. It also considers the equally important questions of how to empower them so that they can participate competently and effectively in the collaborative endeavor to achieve one or more SDGs, and how to build a sufficient level of trust between the actors in order to facilitate the exchange and pooling of knowledge, ideas, and resources.

Chapter 7 considers how to define problems, stimulate mutual learning, and catalyze innovation in ways that spur the development of new and bold solutions that carry the promise of effectively solving the problem(s) at hand while enjoying widespread support. Innovation is important to break deadlocks and solve complex problems that cannot be solved by retreating to standard solutions.

Chapter 8 looks at joint efforts to build and test prototypes of the most promising solutions in order to prompt fast learning about what works in practice. Prototyping is a crucial strategy for detecting and correcting problematic issues at an early stage where the costs of failure are still relatively minor. Iterative cycles of testing and revising prototypes enhances the chance of goal attainment.

Chapter 9 discusses how local actors may find ways of funding and financing the design and realization of cocreated solutions that facilitate cost and risk sharing. Despite the manifold resource contributions of the actors participating in cocreation, financial resources are needed both in the initiation and design phases and in the implementation and evaluations phases. The chapter looks at how these resources are provided, for example, by means of blended financing.

Chapter 10 looks at how cocreated solutions are implemented through collaborative adaptation that involves downstream actors such as users, households, neighborhoods, and local businesses in adjusting the form and content of new solutions to new developments and the actual conditions on the ground. Collaborative adaptation helps to ensure the robustness of the new solutions.

Chapter 11 reconsiders how local cocreation projects can be jointly evaluated in ways that respect their emerging character and spur experiential learning. The traditional evaluation tools needs to be supplemented by new forms of developmental evaluation that aim to support continuous improvement and innovation of cocreated solutions by asking a series of critical evaluative questions.

Chapter 12 confronts the challenge of holding projects based on cocreation to account for their results and impact and promotes the idea of social accountability that allows external actors to critically scrutinize the outputs and outcomes of cocreation based on publicly available accounts provided by local projects.

Chapter 13 reflects on the nature and character of cocreation and the different national and local conditions for promoting cocreation of SDG solutions and based on these reflections it calls for the development of new forms of leadership and management that can support and enhance collaborative processes of creative problem-solving and drive them to successful conclusion.

The book concludes with a critical discussion of some big global challenges and possible ways forward. *Chapter 14* revisits the economic discussion of the need to incorporate the natural limits to growth in economic growth theory, the need to secure political stability in times of rapid societal change triggered by the transition to sustainable living, and the democratic challenge of how to accommodate the pressure for enhancing empowered participatory governance while respecting the political authority of political leaders and the institutions of government.

How to Use This Book

This book is dedicated to all those people who want to act locally to reach global goals and use collaboration in partnerships and networks as a governance tool.

Policy entrepreneurs, social innovators, and professional changemakers around the world may read the book on their own initiative in search of inspiration and advice about how the difficulties, barriers, and dilemmas emerging in local processes of cocreation can be tackled. As mentioned above, the main part of the book provides a systematic analysis of the different steps in and aspects of local cocreation processes in relation to which it identifies core dynamics, problems, and solutions. This format permits readers to compare their own experiences, problems, and aspirations with the scientific and empirical insights from existing research, and in so doing, to get new ideas about how to spur cocreation of public value outcomes.

Public and private organizations may also use the book as a part of voluntary or mandatory training programs that aim to empower local actors and give them a head start when it comes to spurring local cocreation of SDG solutions. To this end, the book combines theory-based explanations of the basic arguments about how to enhance goal attainment through cocreation and empirical insights into local experiences and best practices with inventories of practical tools and recommendations that support local action.

The book is published in Golden Open Access so that people all over the world can download it freely and gain access to new knowledge about how to use multiactor collaboration as a lever of change. This free and open access supports our ambition to use our scientific and practical knowledge acquired through decades of engaged scholarship to make a real impact.

Our hope is that the ideas, arguments, and advice put forth in this book will help to accelerate the formation of local platforms and arenas for collaborative innovation that can help us to reach the highly ambitious SDGs by 2030. We are not so naïve that we believe that our scholarly input alone will change the world, but we are convinced that local changemakers – whether public or private – who sample useful scientific and practical knowledge, compare it to their own experiences, and critically reflect on its usage can spearhead the change we need to secure political, social, economic, and environmental sustainability.

Chapter 2

The Key Role of Local Governance in Achieving the SDGs

Abstract

This chapter looks at the crucial role that local action plays in achieving the SDGs. It begins by revisiting *the transition from the Millennium Development Goals to the Sustainable Development Goals and ponders the reasons why we should have faith in the prospect for successful goal attainment. Next, it demonstrates the importance of local responses to global problems and challenges targeted by the SDGs and discusses the motivation of local actors to contribute to the changes that need to be made in order to generate inclusive prosperity while protecting the planet. Finally, the chapter identifies some of the key barriers to local action and reflects on how we broaden the scope and improve the conditions for local people and organizations to initiate and drive change.*

Keywords: Sustainable Development Goals; local action; public and private actors; global governance; national governance; Millennium Development Goals

The UN SDGs

In 2000, the UN member states agreed on eight Millennium Development Goals (MDG) that focused on urgent problems in the Global South, such as high child mortality rates, extreme poverty, failure to fulfill basic needs, and environmental degradation. In 2015, as the deadline for achieving the MDGs neared, evaluation reports showed that millions of lives had been saved, a billion people were lifted out of extreme poverty, and clean drinking water was available to most people in the developing countries. Most significantly, perhaps, growth in low-income countries had accelerated more than in middle-income countries. Outcomes

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pertaining to the fulfillment of basic needs, such as healthy nutrition, schooling, and gender equality and protection of the natural environment, were more mixed and called for the intensification of future action.

Just as an athlete doing a 100-meter sprint would not think of stopping half way to the finish line, the UN had no intention of giving up its struggle to secure a shared prosperity in a sustainable world. Indeed, when the UN member states unanimously agreed on the 17 Sustainable Development Goals (SDG) in 2015, they raised the stakes and stepped up the global effort to make the world a better place while securing the future survival of humankind. The SDGs provide a blueprint for a sustainable development that allows people to grow and prosper without harming the planet and preserves these possibilities for future generations. The new goals are broader and more inclusive than the MDGs and more ambitious in targeting the root causes of poverty. Most importantly, the SDGs are universal in the sense that they are not merely goals for the Global South but target problems and challenges in all countries. The global relevance and validity of the SDGs is crucial since it underlines the common destiny of humankind, perhaps most acutely expressed by Goal 13, which prompts us to take urgent action to combat climate change and its impacts.

The SDGs address three themes: (1) social and economic prosperity; (2) fairness and social equality; and (3) environmental protection. These broad themes highlight three crucial aspects of economic, social, and environmental sustainability. There has been much discussion about possible tensions between some of the SDGs. For example, Goal 8 seeks to enhance economic growth while Goal 13 aims to reduce CO_2 emissions to combat climate change. However, whether goals such as these are compatible or not depends on how they are achieved. Hence, both the development of a strong green-tech sector and the transition to a circular economy may help to make Goals 8 and 13 mutually reinforcing.

The SDGs provide a common language for talking about intractable problems and the need for joint action and innovative solutions. The problems, goals, key concepts, and tools are described in the same terms in all the different languages, thus limiting ambiguous interpretations that may allow for the justification of inaction or actions that go against the SDGs. What is open for interpretation is not what to do, but how to do it.

Moreover, the 17 SDGs emphasize the need for a holistic approach to making the world a better place. Agenda 2030 stresses that many of the problems addressed by the SDGs are interconnected and that efforts to meet one goal will tend to have positive implications for other goals. For example, many initiatives aiming to promote clean water and sanitation in accordance with Goal 6 will have a positive impact on Goal 3 on good health and well-being. Securing positive synergies between some of the other goals – e.g., between Goal 8 on decent work and economic growth and Goal 11 on sustainable cities and communities – might be more challenging and call for a coordinated approach in order to prevent unintended negative spill-over effects. Indeed, the noble ambition of leaving no one behind can only be reached by moving forward on all of the goals and to do so by 2030. This urgent and holistic approach to goal attainment begs the

question of whether there is sufficient reason to believe that this new set of global goals are achievable.

The good news is that there are at least five aspects of the SDGs that greatly enhance the chance of their realization, or at least the prospect for making major progress toward goal attainment. The first aspect is that the 17 SDGs are further disaggregated into 169 targets and 231 indicators. The UN has made a huge effort to provide relevant data and measure progress on the different targets, and many individual countries are working to construct national baselines, develop appropriate indicators, and measure results. Thus, the SDGs are not merely abstract goals for a better world, but concrete and measurable targets that can be effectively assessed and monitored. Provision of data facilitates solution-oriented sustainability research (Filho et al., 2017). To this end, *Future Earth* has been designed as a global research platform and science-practitioner partnership that aims to provide the knowledge, ideas, and tools needed to catalyze, incubate, and coordinate transformation geared toward sustainability and the achievement of the SDGs.

The second aspect that supports goal attainment is that the SDGs have been mainstreamed within all UN organizations. The SDGs are not merely a task that the development branch of the UN has responsibility for and works with. All parts of the UN system are committed to supporting the realization of the SDGs and must document their particular contributions. The mainstreaming of the SDGs is in itself a major achievement considering the fragmentation of the UN system and the many and sometimes competing agendas.

The third aspect is that the UN member states are committed to using their government organizations, budgets, and policy instruments to work for the realization of the SDGs. Hence, this strategy takes into account that goals that are not supported by organizational infrastructures, financial means, and policy changes stand a slim chance of being met. In some countries, local governments have integrated the SDGs in their local governance strategy, and in other countries such as Norway, all government agencies as well as publicly financed research projects must demonstrate how they help to achieve one or more of the SDGs. Such institutional incentives are crucial for mobilizing the resources, momentum, and commitment that are needed for making real and decisive progress.

The fourth aspect is that the SDGs have been cleverly communicated to people all over the world, not least by means of the catchy multicolored pictograms that illustrate each of the 17 goals. The colorful icons shown in Fig. 2.1 are easily recognizable and function as a symbol for efforts to make a better world for engaged citizens and stakeholders around the globe. The pictograms have made the SDGs come to life and gained an everyday presence on advertising billboards, pins that people wear on their clothes, and logos found on websites, magazine covers, etc. Perhaps this is one of the greatest ever communicative achievements of the UN.

Finally, the 2030 deadline for achieving the 17 SDGs creates a sense of urgency. We do not have all the time in the world. The clock is ticking and we have to act now to deliver on our bold ambitions, and signal that people can

Fig. 2.1. The Multicolored Icons Illustrating Each of the SDGs.

take action and accomplish great things when they join forces and set their mind to do it.

Here, seven years into the SDG era, the official assessment is that despite continued progress in some areas, goal attainment is not advancing at the speed required to meet the goals in time. In consequence, the SDG summit in September 2019 called for a decade of intensified action. We need *global action* to secure a strong political leadership and commitment to the SDGs at the level of national governments. We need *government action* to mobilize public institutions, budgets, and policies in the struggle to achieve the SDGs. We need *people action* that brings citizens, neighborhoods, civil society organizations, private enterprises, and trade unions to join forces to make progress. Finally, we need *inquiring action* by the media and academia in order to critically scrutinize, stimulate, and inform the search for ways to meet the goals (Fig. 2.2).

The UN and other global organizations play a crucial role in setting the agenda, stimulating multilateral action and monitoring progress. However, the real political, financial, and organizational capacity to drive the much-needed societal transformations is to be found at the national level. To even out the national capacities for achieving the SDGs, wealthy countries must undertake a massive transfer of aid, financial capital and investment, technology, expertise, and knowledge to less affluent countries and contribute to establishing trade agreements that are fair and favorable to these countries. Regional collaboration between neighboring countries may also spur balanced economic growth and facilitate diffusion of best practices supporting the development of effective, accountable, and democratic public institutions and free and independent media and research.

Yet, despite all their resources, capacities, and formal authority, it is difficult for global institutions, supranational organizations, and national governments to make real changes on their own because it is hard for them to reach, mobilize, and engage citizens and local stakeholders. Robust transformations toward the SDGs cannot be ensured simply from above. Instead they require engagement of

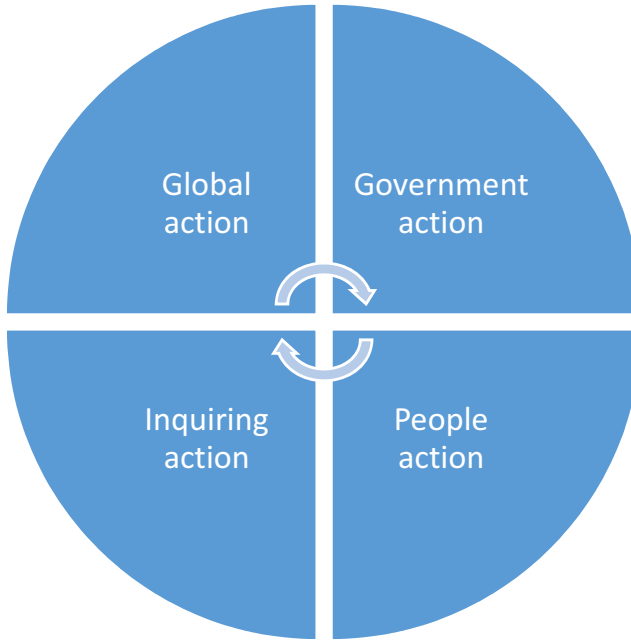

Fig. 2.2. Interrelated Patterns of Action Promoting the SDGs.

local public and private actors to find and employ new ways of redistributing wealth, producing and delivering welfare solutions, providing decent work conditions, facilitating transportation of goods and people, producing and consuming energy, protecting nature from degradation, etc. Local action is indispensable for reaching global goals for a sustainable future (Awortwi, 2016; Stoker, 2011; Sujarwoto, 2017).

Local Responses to Global Problems

Although the famous UN Agenda 21 slogan "think globally, act locally" tends to underestimate the need for global action, it stresses that local action holds the key to solving many of the global problems and challenges that have motivated the formulation of the SDGs. The slogan highlights the core of the argument advanced in this chapter, namely that local action is a cornerstone for solving some of the most pressing problems of our time. This line of thinking is also a central aspect of the UN's strategic approach to implementing the SDGs (Reddy, 2016). Local action refers to on-site processes and projects that aim to develop and implement concrete solutions to specific problems as they occur in real time. Research suggests that local action can accomplish things that action at other levels of governance cannot (see Brinkerhoff & Johnson, 2009). In a nutshell, the proximity of local actors to pressing problems and context-specific opportunities

for action enhances their collective motivation and capacity to promote economic, social, and environmental sustainability. This proximity advances the translation of goals into concrete strategies, facilitates task coordination, accommodates the mobilization of resources, grants actors influence over decisions that affect them, and promotes social accountability.

To start with, local action is crucial for securing the social embedding and adaption of the SDG goals and targets to local conditions. Local actors have first-hand knowledge about concrete problems and challenges and the possible causal relationships between them (Stafford-Smith et al., 2017). Without this local insight, it is difficult to predict what will work, to explain failure, and to develop alternative solutions that will perform better. Effective strategies for raising the level of education among children must take into account contextual factors such as the local educational tradition, existing school policies, school structure, available resources, and the job market. In the same way, decisions regarding which strategy works best for recycling waste depends on insider knowledge about the local infrastructure and local citizens' attitudes and behaviors.

Another important function of local action is to facilitate the translation of the SDGs to ensure that they are meaningful and relevant for those actors who are expected to contribute to their attainment. SDGs that are well adapted to local conditions and appear important to local actors can serve as common reference points for collective efforts to foster innovative solutions. Translation of global goals into local aspirations holds the potential to broaden the base of support for the SDGs.

Local action is also valuable because the proximity to concrete problem-solving tends to support a holistic approach to goal attainment. The closer you are to the complexities of real-life problems, the more difficult it gets to close your eyes to the interconnections between problems such as poverty, unemployment, and crime. Proximity stimulates holistic problem-solving. A case in point is the turn to community policing in many countries. The focus is on breaking vicious cycles between social and economic problems in a given neighborhood and high levels of crime and public insecurity, which may in turn deepen socioeconomic problems (Diamond & Weiss, 2016).

Local action also has the potential to mobilize resourceful local actors to support the effort to meet the SDGs. Local authorities, private businesses, civil society organizations, and social entrepreneurs possess so-called NATO resources that are important for achieving the SDGs. Christopher Hood (1986) introduced the concept of NATO resources to draw attention to four important governance assets. *N* stands for *nodality*, which refers to an actor's centrality in terms of connections to other actors. Having a central position in a network of local actors is an important resource for mobilizing others to act. *A* stands for *authority*, which refers to the position and legitimacy that actors enjoy, which tends to condition their ability to prompt action. *T* stands for the *treasure* that an actor possesses in terms of available financial and organizational resources that can grease the wheels of collaboration and fund projects. Finally, *O* stands for the *organizational capacity* that can be invested in problem solving or in bringing actors together and secure their fruitful interactions.

An illustrative example of the mobilizing capacity of local action is the role that local governments and universities played in mobilizing volunteers to plant one million trees in Iraq (United Nations SDG Partnership Platform, 2021). Another example is the mobilization of a wide range of local actors to promote innovative urban planning in Milan, Italy (Dente, Bobbio, & Spada, 2005). A final example is the European Union's LEADER program that aims to spur innovation and growth by mobilizing rural communities to stimulate tourism (Ballesteros & Hernández, 2019). Although national governments also have an important role to play in mobilizing societal actors with NATO resources, local governments and community leaders are well-placed to identify and recruit actors with relevant NATO resources and commit them to take action. If popular local politicians, well-connected public managers, and local business and community leaders are successfully recruited, they may, in turn, mobilize wider constituencies.

Local action is not only invaluable for adapting the SDGs to different contexts, for enhancing holistic problem-solving, and for promoting people action. It is also a means to grant affected actors some degree of influence over the form and content of initiatives that aim to meet the SDGs. Local action tends to broaden ownership over strategies, initiatives, and projects, thus mitigating local resistance to SDG projects. Moreover, local action empowers and enables citizens and other local actors to hold local and national governments accountable for their action and inaction vis-à-vis the SDGs (Cai, 2008; Fox, 2015; Warren, 2009). By doing so, local action stimulates competent and critical scrutiny of public governance processes and their outcomes.

We can now summarize by saying that although international organizations and national governments have a key role to play in prioritizing the SDGs through agenda setting, provision of funding and strategic design of incentives and collaborative institutions and platforms, local action also provides an essential support system for promoting people action and for concrete inquiry into barriers and drivers of efforts to promote the SDGs.

Why Local Actors Are Likely to Contribute to Achieving the SDGs

Local governance is vital for promoting the SDGs, but how realistic is it that public and private actors at local levels of governance will take on this challenge for spurring local action to achieve the SDGs rather than depending on international organizations and national governments? Although the temptation to leave the task to others is probably widespread, we point to a number of factors that may motivate local actors to contribute to meeting the SDGs. A first motivating factor is that signaling commitment to the SDGs may enhance the status and street credit of politicians, public agencies, private businesses, NGOs, and individual citizens (Nilsson, 2019). Concrete projects that help to achieve one or more SDGs can provide a powerful way of building local reputations for contributing to public value production. This reputational benefit depends on the moral force of the SDGs in a particular locale.

A second motivating factor is that the SDGs address societal problems that are visible and directly felt by local communities, organizations, businesses, and families. These direct experiences place a premium on finding practical solutions to the problems of everyday life, which are concrete rather than abstract. These practical problems and the prospect of solving them justify the investment of time and resources in fostering local action. For example, working together to clean up a polluted lake may have immediate benefits for residents who live nearby or rely on the water for their livelihood. Researchers such as Benjamin Barber (2013) predict that it is the concrete experience of societal problems that will motivate local actors to take the lead in curbing climate change and responding to other major governance challenges.

A third motivating factor is that getting involved in local SDG efforts may help local actors influence how society is developing while avoiding the partisan conflicts and ideological battles associated with national politics. Local governance tends to be more pragmatic in the sense of getting things done based on compromise and agreement. Although there are also interest conflicts and value disagreements at the local level, the immediacy of problems prompts actors to constructively manage their differences to find solutions that work in practice and have a demonstrable value to the public (Sørensen, 2020).

A fourth motivating factor is the recognition of interdependencies between different stakeholders that necessitate the need to exchange and share resources. As Jan Kooiman (1993, p. 4) famously argues in his book *Modern Governance*, the complex, dynamic, and diversified problems of our time are almost impossible for public and private actors to solve single-handedly, because they need access to the knowledge and resources held by other actors. If a city or local community wants to reduce its CO_2 emission, the local government will have to involve businesses and households to get them to reduce their energy consumption or use more sustainable forms of energy; if a child is performing badly at school, the teacher will need to work with parents to get them to help with homework; and if a business wants to market environmentally and socially sustainable products, they need to commit other firms as well to secure overall supply chain responsibility.

A fifth motivating factor is that there is often a relatively short distance from decision to action at the local level. When local actors decide to act, there is less risk of drowning in red tape than at higher levels of governance. Red tape refers to detailed rules and regulations that hamper rather than accommodate flexible, creative, and innovative problem-solving (Bozeman, 2000). The greater the distance between decision-makers and the problem they are trying to solve, the more rules and regulations are needed to ensure coordination and compliance. In this case, obeying the rules and regulation tends to become a goal in and of itself, thus displacing attention and energy away from actual problem-solving. At the local level, decision and problem are closer and thus red tape is less likely to discourage people from investing time and energy in taking action that would obviously benefit themselves and others.

A sixth motivating factor is that participation in local action is more flexible in terms of time and commitment than participation in national politics, which tends to be extremely demanding and all-absorbing. At the local level, a person can

spend an hour a week helping an aging or disabled neighbor to shop, invest two nights a week in teaching adults to read, or sign up to spend every third weekend picking up garbage along the local highway. People may also engage in short-term campaigns to build shelters for homeless youth (Bryson, Crosby, & Seo, 2020), or become part-time local councilors working for equal access to the internet or seek to remove barriers to economic growth for small businesses (Shenglin, Simonelli, Ruidong, Bosc, & Wenwei, 2017; Travers, 2012). Local action provides more opportunity for ad hoc participation.

A final factor that may motivate local action is that participation tends to enhance the acquisition of social and political capital. Engaging in local problem-solving helps people to build network relations that can curb loneliness and isolation for some people (Norris & Inglehart, 2013). Local participation can also be enjoyable and rewarding on a personal level or instrumental in helping individuals to build a career in an NGO, a local government agency, or a political party.

Fig. 2.3 below summarizes the seven factors that can motivate actors to contribute to the achievement of the SDGs through participation in local

Fig. 2.3. Factors That Motivate Local Actors to Promote the SDGs.

action. Together, these factors justify high hopes regarding the prospects for engaging local actors in the promotion of economic, social, and environmental sustainability.

Barriers to Local Action

We should also keep in mind that there are conditions that may hamper local efforts to promote the SDGs. Fig. 2.4 identifies five conditions that can limit the scope for local action. The outer circles refer to "hard" barriers such as laws and regulations and allocated resources and skills, while the inner circles refer to "soft" barriers such as tradition, habits, culture, and community sentiments.

Externally imposed rules and regulations can limit the scope for local action. Dictating to public employees, businesses, NGOs, and local citizens what they can and cannot do is likely to weaken their motivation for getting involved in local action and for developing and maintaining commitment to their own initiatives

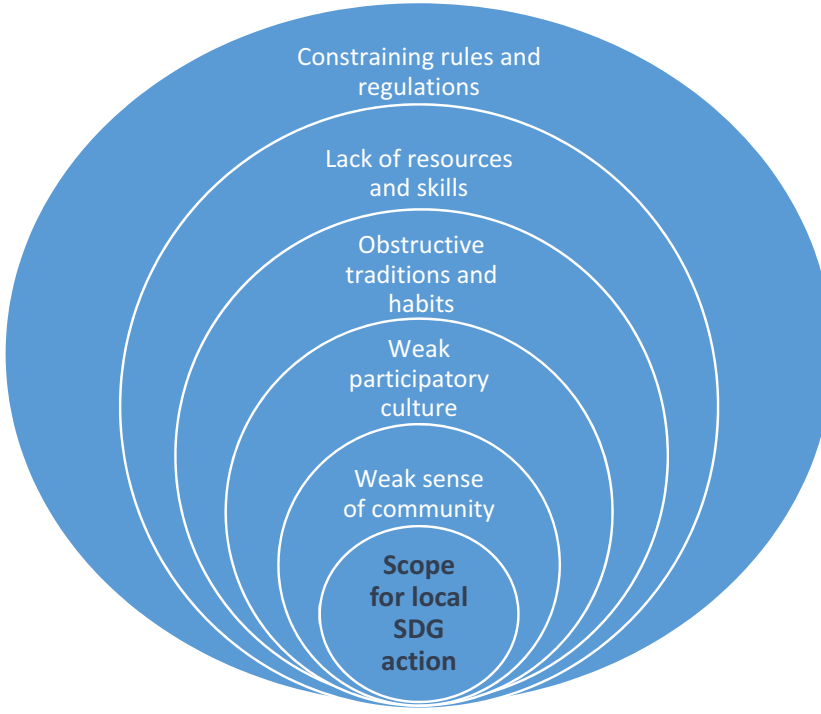

Fig. 2.4. Barriers to Local Action for the SDGs.

(Skelcher & Torfing, 2010). Moreover, limited local autonomy hampers open-ended exploration and development of new, innovative strategies, projects, and methods that take local conditions into account.

It can also impede local action if there are limited NATO resources, professional skills, and leadership capacity among local actors. When local governments and public agencies have little to contribute in terms of funding, formal authority to act, and organizational capacity, it is difficult for them to form robust partnerships with private actors and to persuade them to chip in. When there are few NGOs and businesses with new ideas and entrepreneurial competencies, there will be less local capacity to initiate and carry out SDG projects. Another hindrance is weak leadership from local politicians, public professionals, and civil society actors. Leadership is essential for defining problems that call for local action as well as for creating momentum, courage, and commitment for creative problem-solving (Briefs, 2018; Scheyvens, Banks, & Hughes, 2016).

Another barrier to local action is when the root causes of the problems that the SDGs address are products of deeply engrained local traditions and routinized practices. Traditions and routines are valuable because they build capacity to act in a complex world that offers endless opportunities for action. Without tradition, we would not know what counts as appropriate and meaningful behavior in different contexts, and without routines, people would have to think through everything they do all the time, which would impede our ability to concentrate on developing new ways of tackling problems when and where it matters most (March & Olsen, 1995). But sometimes traditions and routines become a barrier to solving the pressing problems that inform the SDGs. Many tend to be reluctant to move beyond their routines. Hence, it can be scary for communities to relinquish their traditional but harmful fishing methods in favor of embracing new untested methods, even if they promise to be more effective and better for the environment. Another example of the reluctance to change arising from customary behavior is the difficulty of preventing corruption where both public servants and citizens regard giving private gifts in return for public services as traditional and appropriate.

In some local communities, there is a strong participatory culture that serves as a basis for initiating local action for the SDGs. In other communities, people may not be used to participating in local problem-solving with each other or with the local public authorities. In addition, there may be few people with the participatory skills and experiences necessary for organizing local action and weak connections between public and private actors that limit efforts to forge local collaboration. A weak participatory culture, limited organizing skills, and thin network ties can be a serious barrier for engaging actors in activities that promote the SDGs. To redress these weaknesses, organizing efforts may have to focus on picking the low-hanging fruits that give people a positive experience with participating (Ventura, Miwa, Serapioni, & Jorge, 2017).

Finally, the propensity to take local action is related to how much the inhabitants identify with their locality. Weak community sentiments may suppress commitment to investing time and energy that goes beyond narrow self-interest

and that discourage from forming partnerships with others in an effort to turn the local community into a better place to live. It is noteworthy that community sentiments are sometimes stronger among newcomers who have chosen a particular locality and cherish its specific characteristics and atmosphere, while people who are born in a place may be less aware of their attachment and need to be reminded of its value and potential. Hence, newcomer may be easier to mobilize than long-term residents. Communities with high residential turnover can be difficult to mobilize because none of the residents have a strong attachment and are willing to invest in its future development.

Enhancing the Scope for Local Action

Mobilizing public and private actors and overcoming barriers to local action in the pursuit of the SDGs not only calls for local autonomy and discretion, NATO resources, skills, commitment and leadership capacities, and community-focused efforts from local actors to overcome the barriers listed above. It also calls for active and focused support from global and national levels of governance. Table 2.1 provides a list of forms of support from higher levels of governance.

Those global and national actors who have the capacity to influence the conditions under which local actors operate can do a lot that give local actors and communities more opportunity for taking part in the promotion of the SDGs. For example, global actors can promote Fair Trade Agreements that can play a role in fighting poverty and empowering local communities or can introduce CO_2 emission trading regimes that prompt local energy producers to create partnerships for alternative energy sources (Hubacek, Baiocchi, Feng, & Patwardhan, 2017). National governments could integrate the SDGs into educational curriculums or delegate responsibility to local governments for initiating SDG action.

Global and national public institutions, media companies, research institutes, interest organizations and independent agencies and think tanks also have an

Table 2.1. What Global and National Levels of Governance Can Do to Stimulate Local Promotion of the SDGs.

(1)	Sustainable rules of the game
(2)	Agenda setting
(3)	Funding
(4)	Regulation that incentivizes local action
(5)	Local autonomy to pursue the SDGs
(6)	Local access to relevant scientific knowledge
(7)	Training programs for local entrepreneurs
(8)	A decentered communication infrastructure
(9)	Celebrate local achievements
(10)	Diffuse of best practices

important role to play in communicating the urgency of promoting the SDGs and the crucial role of local actors in achieving them. Global and national actors have privileged ability to capture the attention of large audiences and the ability to host events that bring together actors from different levels of governance in focused discussions about what needs to be done to meet the goals of one or more of the SDGs (Hajer et al., 2015).

Strong global and national actors can support promising local governance initiatives through the provision of funding in the form of special purpose grants or higher budgets for local governments, businesses and NGOs that are conditional upon progress toward achieving the SDGs (Awortwi, 2016).

Moreover, not all national rules and regulations are red tape that hampers local action and innovation. Green tape rules and regulations incentivize and empower local actors to take effective and innovative action in the pursuit of specific governance outcomes, such as the SDGs (DeHart-Davis, 2009). Policy-makers at higher levels of governance may play a key role in designing green tape that motivates actors to engage in local action for the SDGs rather than shrinking their autonomy.

Often, the ability of local governance actors to contribute to meeting the SDGs hinges on their access to scientific knowledge and hard facts about what works and how to avoid failure. Input from universities and research institutions is important in this respect, and it is a government task to facilitate collaboration between local communities, universities, and other research institutions that provide relevant knowledge in support for the development of local solutions. One way to do this is to create geographically-distributed university structures and to set obligations that universities will make their knowledge accessible to relevant local actors (El-Jardali, Ataya, & Fadlallah, 2018). A related task for universities and other teaching organizations is to provide practice-oriented leadership training for public professionals as well as for civil society and business entrepreneurs. Local actors may benefit tremendously from research-based knowledge about how to exploit drivers of and overcome barriers to local SDG action.

Efforts to develop viable and informed strategies for promoting the SDGs also hinges on the existence of well-functioning independent and critical media and a digital communication structure that accommodates exchange of innovative ideas, coordination of activities, and the formation of partnerships (Odendaal, 2003). Local actors rarely have the capacity to accomplish these tasks by themselves and must rely on national and global actors to do so.

National and global actors also have a privileged position when it comes to celebrating positive local achievements. Global prizes and awards such as "greenest city in the world" or "Europe's best workplace" are powerful instruments when it comes to motivating politicians, firms, and organizations to change their ways, and so are the many different lead tables such as the PISA ranking on school performance, and labeling systems such as CSR charters and logos for organic products (Huang, Kuo, Hung, & Hu, 2019). However, it is essential that some of these instruments for celebrating contributions to meeting the SDGs do not only celebrate those communities, businesses, agencies, and organizations that

do best, but also highlight relative achievements. The initial conditions vary hugely between localities, and what is in reality good progress can end up standing out as failure.

A final task for global and national actors, including global special purpose organizations, national governments, interest organizations, and the media, is to secure the diffusion of best practices and examples of local progress on the SDGs. This can be done through the digital posting of case descriptions but also and most importantly through events such as innovation camps and workshops that facilitate face-to-face interaction that accommodates mutual learning between those who work with similar problems and projects in different local contexts.

Concluding Remarks

In sum, local action plays a crucial role for developing and implementing concrete strategies, methods, and tools for advancing the SDGs by taking into account contextual factors and mobilizing relevant and affected actors.

There are many factors that motivate public and private elites, subelites, and local citizens to get involved in promoting one or more of the SDGs, but there are also a number of barriers that hamper local SDG action and thus need to be overcome or mitigated in the future.

Promotion of local projects and initiatives calls for structural support and leadership. Although local governments and business and community entrepreneurs can to some extent deliver on both the structural and leadership dimensions, global and national decision-makers also have considerable influence on the local conditions for pursuing social and economic prosperity, social equality, and environmental protection. Hence, the high hopes for local SDG hinge on global and national endeavors to improve conditions for collaborative innovation at the local level.

Chapter 3

Cocreation Is the Answer

Abstract

This chapter looks at how Goal 17 on partnerships can be a lever of change. It discusses the partnership approach to achieving the SDGs and unravels the key functions of networks and partnerships, such as knowledge sharing, coordination, and collaborative governance. It carefully explains why we need to shift the focus of the global debate from collaborative governance to the cocreation of public value outcomes. It then provides a schematic account of the different steps in the process of cocreating outcomes, which include initiation, design, implementation, and evaluation. Finally, the chapter identifies the key merits of cocreation and looks its dark side straight in the eye.

Keywords: Partnerships; networks; collaborative governance; cocreation; public value; lever of change

A Collaborative Partnership Approach for Reaching the SDGs

The UN SDGs not only set an important global agenda but also provide the means of implementation for how to deal with the urgent problems and challenges that have prompted the formulation of the SDGs. The means of implementation are found in Goal 17, which recommends a partnership approach to designing and implementing solutions that will help achieving all the other SDGs. Hence, the opening statement in Goal 17 "Partnership for the goals" says:

> A successful sustainable development agenda requires partnerships between governments, the private sector, and civil society. These inclusive partnerships, built upon principles and values, a shared vision, and shared goals that place people and the planet at the center, are needed at the global, regional, national, and local level.

Co-Creation for Sustainability, 23–40

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As such, Goal 17 calls for the formation of multi-stakeholder partnerships that are crucial for connecting the SDGs, mobilizing resources and enhancing effectiveness and impact. Multi-stakeholder partnerships should be formed at all levels of governance from the global to the local. At the global level, the North and South must partner up to ensure redistribution of wealth, technology, and trading benefits; at the cross-national regional level, countries must exchange knowledge, experiences, and best practices; at the national level, public and private actors must align their efforts to build capacities for achieving the SDGs; and finally, at the local level, all relevant and affected actors must joint forces in creating projects, initiatives, and campaigns that accelerate goal attainment. Goals 17 directly appeals to people in both developed and developing countries to join or create a group in their local community that seeks to mobilize action on the implementation of the SDGs. People should also encourage their (local) governments to partner with businesses, civil society organizations, academia, etc., for the implementation of the SDGs. An *SDG Partnerships Platform* has been created to inform, inspire, and educate people and spur networking and partnering across organizations, sectors, and levels. It provides empirical accounts of more than 5,000 partnerships, operating at different levels and with different constellations of actors.

When looking closer at the 19 targets of Goal 17, the partnership approach becomes a little blurred. Hence, some of the targets are mainly concerned with North-South transfers of financial capital, technology, and knowledge, while others aim to create a universal, rules-based, open, nondiscriminatory, and equitable multilateral trading system or to enhance political and institutional capacity-building at the national level in order to ensure a well-financed, effective, and coordinated effort to increase sustainability and monitor progress. However, target 17.16 and 17.17 clearly recommend a partnership approach to implementing the SDGs:

17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology, and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

17.17 Encourage and promote effective public, public-private, and civil society partnerships, building on the experience and resourcing strategies of partnerships.

These targets leave no doubt as to the importance and impact of partnerships for implementing the SDGs: partnerships support the achievement of the SDGs by mobilizing and sharing knowledge, expertise, ideas, and resources, and their formation should be encouraged and promoted based on prior experiences with partnerships, networks, and other forms of collaborative governance. A knowledge-based promotion of multi-stakeholder partnerships is the key ambition of this book.

Research provides strong support for a network and partnership approach to solving complex problems (Ansell & Torfing, 2014; Crosby & Bryson, 2005; Kickert, Klijn, & Koppenjan, 1997; Klijn & Koppenjan, 2015; Roberts, 2000; Sørensen & Torfing, 2007). Knowledge, resources, and capacities are often unevenly distributed across actors, sectors, and levels and need to be pulled together to spur creative problem-solving and implement common goals.

Partnerships, Networks and Their Key Functions

In this book, we define *partnerships* as an agreement between two or more public and/or private actors who voluntarily chose to collaborate in order to achieve a common goal by creating some kind of synergy whereby the actors make use of each other's talents. Partnerships are sometimes associated with collaborative arrangements based on a formal contract that regulates how the partners share or reallocate risks, costs, benefits, resources, and responsibilities (Koppenjan, 2005). In line with the notion of multi-stakeholder partnerships in Goal 17, we shall here talk about partnerships in a looser and less formal sense of actors partnering up in order to exchange or pool resources in the effort to achieve jointly defined goals in response to problems, challenges, or emerging opportunities.

This understanding of partnerships brings us close to the increasingly fashionable concept of *governance networks* defined as horizontal relationships between interdependent actors who negotiate and deliberate within a relatively self-organized institutional arena in order to produce effective governance solutions (Ansell & Torfing, 2016; Sørensen & Torfing, 2007). What the network concept brings to the table is: *first*, that the relationship between network actors is horizontal in the sense that no actor can solve a dispute in the network through the exercise of formal authority based on a higher hierarchical position; s*econd*, that social actors join forces because they are mutually dependent on each other's resources and competences; and, *third*, that interaction takes place in self-regulated arenas consisting of norms, rules, and values that are shaped and reshaped by the participants. Nevertheless, both the concept of partnerships and networks are based on the same basic assumption that actors come together because they realize that they can do things together than they could not do at all or as well on their own. As such, we shall use the two notions interchangeably.

The last point begs the question of what it is the actors in a network or partnership are doing together to achieve a common goal. We propose that public and/or private actors who join forces in a network or partnerships have different and over time rising aspirations for their joint interaction. As illustrated by Fig. 3.1 below, networks and partnerships may perform three key functions that the participating actors may add on top of each other in a progressive and cumulative way.

At first, when public and/or private actors get together and form a network or partnership, they are eager to learn more about the problem or challenge at hand. They want to know more about past solutions and their limitations, what is presently happening, and what the other actors are thinking and doing. Hence,

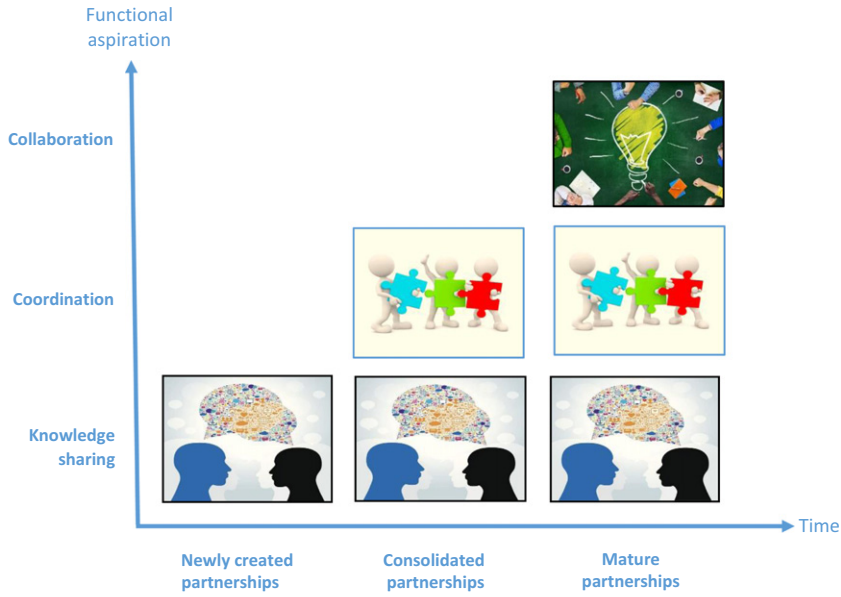

Fig. 3.1. Rising Functional Aspiration of Networks and Partnerships.

newly created networks and partnerships aspire to engage in knowledge sharing so that everybody has the same basic knowledge about the problem and access to the same basic information about past and present problem-solving strategies and the drivers and barriers pertaining to these strategies. Knowledge sharing is very important as the lack of knowledge, outdated insights, misinformation, prejudice, and ignorance tend to hamper problem-solving. Conversely, a freely flowing exchange of knowledge and information between interested parties will tend to stimulate learning and build momentum for action as people begin to see the urgency of well-known problems and the opportunities for acting upon them.

When the actors have acquired a contextual understanding of the problem, gotten to know each other, and developed a certain level of trust, they might raise their expectations and aspire to coordinate their actions, projects, and initiatives in order to avoid conflicts and clashes (negative coordination) and create synergy by exploiting complementarities and creating mutually reenforcing effects (positive coordination). Many of the actors who are brought together in networks and partnerships will already be engaged in relevant projects and activities and coordination of these will often be a major achievement. Uncoordinated actions may not amount to much, but with the right timing and sequencing and mutual support between related actions, two plus two may suddenly equal 5. Hence, consolidated networks and partnerships contribute to effective governance and

accelerated goal achievement by engaging in ongoing coordination. Since there is no hierarchical authority capable of coordinating activities top-down through imposition, and collaboration has replaced market-based competition, coordination in networks and partnerships will tend to emerge in a bottom-up fashion and will rely on negotiation and deliberation among a plethora of actors. Recent research refers to this type of coordination as "pluricentric coordination" (Pedersen, Sehested, & Sørensen, 2011; Sørensen, 2014).

Mature networks and partnerships, which are already sharing knowledge and coordinating ongoing activities in a trustworthy manner, may aspire to engage in collaborative problem-solving that involves defining the problem at hand, designing and implementing new and bold solutions, and measuring their impact. This is a crucial step since solving complex societal problems clearly requires more than continuous knowledge sharing and pluricentric coordination. Breaking deadlocks and accelerating change oblige public and/or private actors to jointly explore the problem at hand, agree on a relatively precise diagnosis, canvas local options, formulate a plausible action theory that links particular actions to results and outcomes, develop and test prototypes, and mobilize resources for implementation, upscaling, and diffusion.

Collaborative Governance

Collaborative governance in networks and partnerships provides an attractive alternative to top-down government and market-based competition. It rallies social and political actors around a particular problem or challenge, aligns their goals and ambitions, and makes use of their different experiences, competences, ideas, and resources when exploring possibilities for designing and implementing joint solutions to common problems. For many years, collaborative governance in networks and partnerships was considered the last option and was only tried when hierarchical government and market competition had been tried and found wanting. More recently, however, collaborative governance in networks and partnerships has gained prominence and is increasingly considered as a potent lever of change. Collaborative governance tends to involve knowledgeable and resourceful actors from outside the public sector. It facilitates the exchange of manifold resources and builds a joint ownership over common solutions and thus avoid the conflicts and rivalry that follows from cut-throat competition in the market place.

The new interest in collaboration as a tool for governing modern societies has stimulated scholarly debates about the nature of collaboration (Gray, 1989; Straus, 2002). Collaboration can be defined as an interactive process through which actors with different roles, interests, and perspectives work together to transform raw materials such as lived experiences, scientific knowledge, facts and norms, institutionalized practices, and material structures into new designs that solve a particular problem or tackle an emerging challenge.

For many years collaboration was associated with protracted deliberations based on the force of the better argument that would eventually foster a

unanimous consent where everybody agrees about everything. Recently, however, there has been a growing recognition that seeking to obtain a total consensus in multi-actor settings is not only time-consuming but also carries the risk that the obtained consensus is either premised on external or internal exclusions (Young, 2000) or based on the least common denominator that seldom provides an innovative solution to the problem at hand (Torfing, 2019).

In response to these problems, it makes sense to further qualify the definition and understanding of collaboration by making two important assertions. First, collaboration involves a combination of reason, passion, and rhetoric. Rational argumentation alone will not lead to consensus in multi-actor settings as the actors will tend to disagree on the normative and factual premises for the discussion and often face trade-offs, dilemmas, and paradoxes that cannot be resolved on rational grounds.

Second, collaboration merely fosters a rough consensus that is partial in the sense that the actors involved in deliberative interaction foster an agreement that on pragmatic grounds is accepted as a "good enough" solution that will be further advanced despite dissent. Such a rough consensus is often created in a well-attended meeting where the person chairing the meeting summarizes the content of an agreement and asks if it is acceptable to everybody, where after the majority nod and those who disagree keep silent.

While this way of making decisions in collaborative arenas falls short of providing an all-embracing consensus, it allows collaborating actors to move forward to test agreed upon solutions in practice. Based on these arguments, we shall define collaboration as the constructive management of difference in order to find common solutions to joint problems (Gray, 1989). Collaboration is premised on the presence of notable differences between the experiences, views, and ideas of the participating actors and should not seek to eliminate these differences, but instead find ways of constructively managing them to foster agreement about good enough solutions that enjoy widespread if not total support.

Collaboration is particularly useful in turbulent times where disruptive problems and events wax and wane in uncertain and unpredictable ways, and social and political actors want to share the risks associated with dealing with hard-to-solve problems and reap the fruits of a pragmatic cross-fertilization of ideas. This is why collaborative governance in networks and partnerships is called for in the current situation where the social and natural environment is threatened by social inequality, discrimination, violent conflicts, and negative externalities of economic growth.

From Collaborative Governance to Cocreation

While collaborative governance provides an ideal strategy for dealing with complex and turbulent problems and offers a good alternative to hierarchy and markets, there is much to gain from pushing the global debate on collaborative governance a little further and embracing the new concept of cocreation. Indeed, this book aims to demonstrate the potential impact of cocreation on achieving the

SDGs. As such, cocreation may provide the accelerator we need to cross the finish line in time while simultaneously strengthening public governance, democracy, and the resilience of local communities.

While being closely affiliated, the basic ideas of collaborative governance and cocreation are slightly different in at least three important respects (Ansell & Torfing, 2021). First, while collaborative governance is often initiated and facilitated by public agencies seeking to expand their reach beyond what public authorities can normally influence, cocreation is often co-initiated by public and private actors and based on distributed action, meaning that all the participating actors can contribute and seek to advance joint outcomes. Co-creation is also characterized by a distributed leadership that implies that several, if not all, of the participating actors partake in carrying out important leadership functions (Bolden, 2011). Hence, cocreation is less state-centric and thus can also be used in countries with weak state institutions.

Second, while collaborative governance tends to involve organized stakeholders, including professional and well-organized civil society organizations, in targeted problem-solving within a particular policy domain, cocreation tends to involve a broader range of actors, including lay-actors such as individual citizens, user groups, neighborhoods, community leaders, etc., in order to mobilize the resources needed for spurring transformative change across boundaries. As such, cocreation is more people-centric than organization-centric since you do not have to be a private company, a trade union, or a large donor organization in order to have a seat at the table. Affected groups such as youth, women, indigenous people, refugees, and people living in extreme poverty are invited to join the collective efforts to solve global problems through local action.

Finally, while collaborative governance aims to enhance the capacity for societal problem-solving by aligning relevant actors and facilitating mutual learning, cocreation involves a proactive search for new and emerging solutions to present and future problems. In short, cocreation aims to involve relevant and affected actors in the creation of innovative outcomes.

In sum, cocreation is less state-centric and more inclusive when it comes to participation and more focused on collaborative innovation. As indicated in Fig. 3.2, the three defining qualities of cocreation are important for the production of public value. Inclusive participation ensures that the needs of lay-actors are reflected in agendas for change. Distributed action and leadership balance the interests and power of public and private actors. Finally, collaborative innovation helps to break policy deadlocks while securing broad-based support for innovative solutions.

Based on this brief conceptual clarification, we can envision cocreation as an inclusive and distributed process of multi-actor collaboration that aims to find new ways of solving pressing problems. A more elaborate and demanding definition defines cocreation as:

> A distributed and collaborative process of creative problem-solving that proactively mobilizes public and private resources, including those of lay-actors, to jointly define problems and design and implement solutions that are emergent and seek to generate public value.

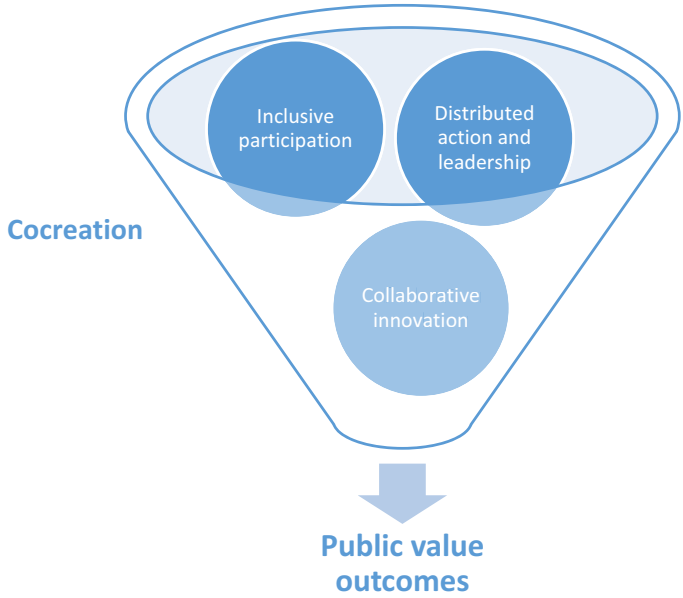

Fig. 3.2. Cocreating Public Value Outcomes.

In practical terms, this fine-grained definition of cocreation means that we should aim to advance collaborative processes characterized by:

- A relative even distribution of the ability to initiate action and the responsibility for carrying out leadership tasks (a distributed process)
- Persistent efforts to connect actors from different organizations, sectors, levels, jurisdiction, locations, etc., who share a common ambition to solve a particular problem or challenge (proactive resource mobilization)
- Willingness and courage to think out of the box and pursue emerging solutions that disrupt common wisdom and established practices (creative problem-solving through emergent solutions)
- Early involvement of actors who not only get to contribute to the implementation of new and bold SDG solutions but also get to influence the problem definition and the solution design (wide-ranging influence)
- Solutions that not only benefit the participating actors but are valued by society at large (public value production)

In the messy and imperfect empirical reality, these defining features of cocreation are seldom all present at once. However, to illustrate the main idea, let us take a look at a typical example of local cocreation. Inspired by programs and

campaigns launched by the government, the Youth Foundation of Bangladesh (YFB) has initiated an awareness and participatory action program to reduce the catastrophic impact that Single Use Plastic from local water transport systems has on rivers and local marine life. The Youth Foundation of Bangladesh has raised 375,000 USD for the program and also secured in-kind contributions from national and multinational organizations. It works closely with the local municipality, the City Corporation, water transport lease-holders, and business organizations to create awareness among passengers through information, signposting, and videos to provide additional waste bins, to keep launch areas and boats clean and tidy, to train transport personnel, and to monitor behavior and results. The local partnership explicitly targets SDG 14.1 and 14.2 (United Nations SDG Partnership Platform. 2021).

Cocreational partnerships like this one are important because they translate global goals for the planet into local initiatives that involve public and private actors in diagnosing problems and designing and implementing innovative solutions. Local partnerships expand the reach of the global SDG strategy and make sure that new solutions are tailored to local needs. The collaborative efforts of local (and national and international) actors help to produce solutions that are robust in the sense of being adjustable in the face of new developments and opportunities and that contribute to enhancing local resilience by creating social capital that can be used to generate new projects. Hence, there are good reasons for making cocreational partnerships a primary strategy for achieving the UN SDGs.

The Cocreation Process in Four Steps

To further explain what cocreation is, we shall here provide a schematic account of the four basic steps in an idealized cocreation process. The four steps are shown in Fig. 3.3.

Cocreation is *initiated* by actors who bring together relevant and affected actors in a process of trust-based problem-solving. In the *design phase*, the actors explore the problems at hand, design solutions, and test prototypes. In the *implementation phase*, the actors must secure proper financing, coordinate action, and consolidate new solutions. The last step is the *evaluation phase*, where results and impacts are measured and scrutinized and successful solutions are diffused. The result of evaluation may then feedback to influence another round of initiation, design, and implements. Let's take a close look at each of these phases (see also Ansell & Torfing, 2021).

Initiation

It is important to get a good start, motivate key actors to participate, and create momentum for change. There might be other similar local initiatives to learn from

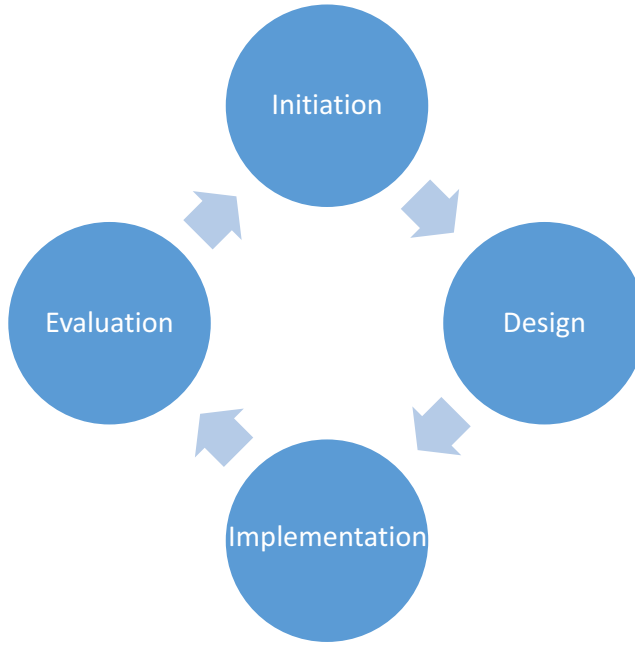

Fig. 3.3. The Four Basic Steps in the Cocreation Process.

or form an alliance with. However, public or private entrepreneurs will typically have to undertake three important task to initiate cocreation:

(1) They must identify and describe an important and pressing problem or challenge that calls for a cocreated solution and develop and broadcast an initial idea about what a solution would look like and why it is needed. Storytelling that emphasizes the urgency of action and the feasibility and desirability of finding joint solutions is a key tool. Using mass media and social media to draw attention to problems and ideas for solutions is crucial, but needs to be combined with networking and canvassing.
(2) They must bring together relevant and affected actors who together possess the knowledge, ideas, competences, and resources that are needed to drive change and produce a collective impact. This task calls for a careful stakeholder analysis, crucial decisions about inclusion and exclusion, and efforts to motivate actors to participate. It is important for the entrepreneurs to both attract those actors who are highly interested in finding a solution and those actors who can bring about the solution.
(3) They must build trust among the participants and facilitate collaboration. Trusting that other actors will openly share experiences, ideas and resources, invest time and energy in finding joint solutions, respect and listen to each other, and create a space for distributed action and leadership is essential for

building collaborative relations among interested parties. Trust-building is enhanced by informal social interaction, developing transparent ground rules for interaction in meetings and other activities, and creating positive upward-going trust-spirals by unilaterally demonstrating one's trust in other actors.

Design

Design of bold, yet feasible, solutions to the many different problems underlying the formulation of the SDGs is the core purpose of cocreation. The entrepreneurs, leaders, and participants in the collaborative process must undertake three crucial tasks in this critical design phase:

(1) They must jointly explore and redefine the problem at hand in order to make it amenable to creative problem-solving and design of solutions that are within reach of the collaborating actors. Problem exploration involves an empathetic sharing of the local experiences of those affected by the problem and new potential solutions. Weak and vulnerable groups without the strength and courage to speak up must be reached through intermediaries or carefully conducted focus group interviews. The soliciting of bottom-up inputs must be combined with input from government agencies, independent experts and academia, collection of statistical evidence, and joint fact finding through excursions, hearings, etc. The different types of input must be weighed against each other and combined so that the competing diagnoses and explanations can be scrutinized. Problem exploration involves deliberate attempts to frame the problem in ways that ensure that the actors can act upon it and hopefully solve it.
(2) The actors must create a shared vision for joint problem-solving that reflects local needs and guides the search for promising solutions. A jointly formulated vision will give direction to the process of creative problem-solving that should be nurtured by mutual learning that goes beyond attempts to correct mistakes and adjust existing policies and should wholeheartedly embrace the quest to discover new and emerging solutions and make sense of the unknown. However, it is important to combine open-ended brainstorming and transformational learning that question common wisdom with critical scrutiny of the new and emerging ideas to identify the most promising ideas. The resulting ideas should be integrated with well-tested strategies in order to enhance the feasibility of problem solutions.
(3) They must build and test prototypes in practice and revise and improve them until they work and seem to deliver the expected results. Prototypes are tentative solution designs that can be tested on a small scale in order to identify strengths and weakness and learn from both. Prototypes should build on a clear theory of action that makes plausible assumptions about the effects of a planned intervention. Experimental testing of prototypes can help to nip problems in the bud, avoid costly failures, and prepare for proper implementation.

Implementation

Implementation of new and promising solutions is critically important to produce collective impact. Many things can go wrong in the implementation phase where the enthusiastic and thrilling embrace of the promise of great achievements is replaced by the hard work of securing sufficient resources, coordinating action, and consolidating progress. Hence, actors involved in the cocreation of SDG solutions must deal with three challenges in the implementation phase:

(1) They must secure proper funding for the upscaling of successful prototypes into new routinized solutions that endure long enough to have a real impact. Local government, private firms or foundations, and foreign aid donor organizations may co-finance the implementation of promising solutions and the involved actors may contribute their own time and energy.
(2) They must coordinate action between the public and/or private actors taking part in the implementation of new solutions and create a clear division of labor between them. Since the cocreating actors frequently share the responsibility for implementation with established public bureaucracies, who perhaps played a limited role in the design phase, there is a strong need for coordination in order to avoid gaps and overlaps in the delivery of the new solution and to exploit resource complementarities that create synergy. The purpose of coordination is to mobilize as many resources as possible to maximize impact.
(3) The actors involved in implementation must consolidate the new solution and modus operandi by means of integrating new solutions with existing practices and engaging in collaborative adaptation of the new solutions to unacknowledged conditions and unforeseen developments on the ground. It is important to remove tensions between the new solution and the context in which it is implemented in order to secure support and enhance program performance. It is also important to involve downstream actors in adapting the solution so that it fits local experiences, organizational resources, and political and economic dynamics that may prevent the use of particular tools and strategies.

Evaluation

Ideally, evaluation should be an ongoing activity, but it is especially important to evaluate whether cocreated solutions deliver the expected results and contribute to achieving one or more SDGs. Such an assessment is not only important for the participants who want to know if all the hard work paid off in the end and produced some desirable results but also for the broader society that may want to scrutinize the outcomes of cocreation and apply successful solutions in other areas and jurisdictions. Hence, the actors have to undertake three crucial tasks in the evaluation phase:

(1) They must measure and assess outputs and outcomes in order to learn more about what works in practice and find ways of improving performance and impact. In addition to learning from the evaluation, the ability to document results and impact is often crucial for securing continued funding and financing.
(2) They must use their own self-evaluation of the process and outcomes to produce an accessible public account of the cocreated solution and it's achievements in order to allow external actors to critically scrutinize the collaborative effort and hold the participating actors to account for failures, mischief, and negative externalities. Cocreation efforts should not become secluded clubs that attract growing suspicion from external actors, but should remain open and transparent arenas that gain legitimacy from their willingness to account for their actions and respond to external advice and criticism.
(3) Finally, they must diffuse successful solutions to other sectors, jurisdictions, and countries that may want to adopt and adapt these solutions to their own specific context. It is a moral obligation to diffuse SDG solutions so that other people and localities can benefit from the positive effects and all of the cocreating actors should act as ambassadors for the beneficial solution and use their network to spread the good news to build global momentum for change.

This schematic account of the different phases and sub-phases in a cocreation process helps to provide a clearer understanding of what cocreation entails. Fig. 3.4 presents an overview of the cocreation process.

It goes without saying that the idealized schematic presented above primarily has heuristic and analytical value, since in reality cocreation is a complex and messy process with many iterations, jumps, gaps, and feedback loops. Sometimes, when the actors reach the design or implementation phase, they realize that they failed to include actors with much-needed competences and thus have to go back and adjust the range of participants. The assessment of results may also reveal flaws in the solution design that calls for reopening the discussion of the nature and character of the problem that might not be properly understood. So, in reality, the different phases and sub-phases are combined in pragmatic and complex ways. Nevertheless, the steps in cocreation discussed above will help us structure the chapters in the remainder of this book.

Five Cheers and a Hurray for Cocreation

This section argues that five distinct properties of cocreation contribute to producing the solutions we need to generate shared prosperity in a sustainable planetary future. Let's look at each of these properties in turn in order to gauge their impact.

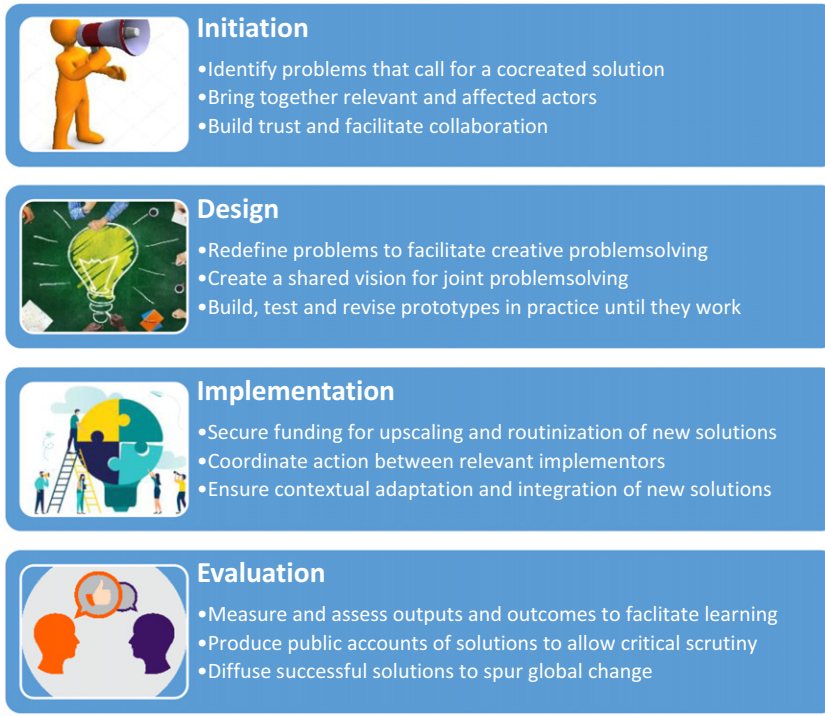

Fig. 3.4. Phases and Subphases in the Cocreation Process at a Glance.

The first distinctive property is empathy. Inspired by the new design thinking that is becoming increasingly influential in the field of public and private innovation management, cocreation is based on and seeks to incorporate the knowledge and experiences of manifold actors, including weak and vulnerable groups that normally have limited or no access to local and global decisionmaking arenas. The open and broad involvement of relevant and affected lay actors is not only motivated merely by concerns for equity and social justice but also concerns for creating solutions that effectively solve the problems at hand and meet local needs. There is no point in drilling a well to fill 50 gallon containers with clean drinking water if the local culture forbids the men who drive the only available cars to transport water containers from the well to the local villages and women and children are not strong enough to carry the containers. Such governance failures can be avoided through the empathetic sharing of local customs and experiences.

Another important feature of cocreation is its deliberate attempt to stimulate open-ended dialogue, brainstorming, and appreciative enquiry that tends to spur mutual learning and innovation. Problem-focused debates in cocreation arenas aim to involve a plethora of actors in conversations that can take different directions and can explore the problem from different perspectives. These debates encourage brainstorming of ideas and insist on appreciating the factual accounts, visions, and possible solutions advanced by different actors (Cooperrider & Whitney, 2001). Creating a safe and open space for multi-vocal deliberation will bring forth new ideas that disrupt common wisdom and allow for cross-fertilization of ideas, both of which are essential for producing innovative solutions. To illustrate, broad-based deliberation may contribute to recasting the increasing frequency of cloud-burst rain triggered by climate change from being an urban hazard to being an opportunity for making the city more blue and green.

A third component of cocreation that supports goal attainment is the preference for broad-based participation in defining problems and designing solutions that tends to build common ownership over new and bold solutions, which in turn reduce implementation resistance. Although it is important to prevent participation from being tokenistic, actors involved in cocreation tend to support the implementation of joint solutions even if their influence on the content of the solution has been limited. The mere possibility for participating in the shaping of new solutions, voicing an opinion, being heard and listened to, and judging the reasons for designing a solution in a certain way tends to make societal actors support cocreated solutions or at least abstain from protesting and trying to stop them. Hence, it is a common experience that letting local farmers or plantation owners participate in the development of guidelines for sustainable farming and forestry will enhance their ownership over and compliance with the new guidelines.

A fourth distinctive property of cocreation is the commitment to inclusion of both organized stakeholders and lay actors including users, citizens, and local communities. By involving and empowering actors from different organizations, sectors, and areas, cocreation expands the amount of resources available for implementation and extends the reach of new solutions because target groups or intermediaries close to these groups assume responsibility for carrying out key tasks and thus contribute to goal attainment. Hence, recruiting and training local women to help give advice on reproductive health to adolescent girls will often prove to be far more effective than relying on distribution of information through local health clinics.

A final property of cocreation worth mentioning is the learning-based implementation process and the involvement of downstream actors in the implementation and evaluation of new solutions. Developing and testing prototypes and gradually upscaling and institutionalizing effective practices help break down the artificial separation of design from implementation and ensure that new solutions are implementable. Moreover, the involvement of the actual implementors in collaborative adaptation of new solutions greatly enhances the chance that they will have an impact.

This brief assessment of the governance potential of cocreation supports the idea that cocreation provides a highly promising method for producing innovative and impactful solutions to wicked problems such as those prompting the formulation of the SDGs. While both public bureaucracies and private enterprises tend to rely on their own limited resources when solving problems, cocreation is based on the idea that it is the possession of relevant experiences, knowledge, and resources rather than rigid organizational boundaries that determines who gets to be involved in processes of creative problem-solving (Bommert, 2010).

On an even grander scale, cocreation has been shown to strengthen democratic legitimacy, increase equity, and enhance resilience (Ansell & Torfing, 2021). Cocreation fosters democratic legitimacy by connecting political and administrative elites with organized stakeholders and lay actors (Sørensen, 2020). It increases equity by giving those groups who risk being left behind a voice in public problem-solving and by ensuring that new solutions are needs-based. Last, yet importantly, it enhances the resilience of local communities by empowering individual actors, building social capital, and constructing relatively permanent platforms that can be adapted to scaffold collaborative responses to disruptive problems and challenges in the future.

The Dark Side of Cocreation

While there are strong reasons to trust that cocreation can help speeding up the efforts to reach the SDGs by 2030, we should not fool ourselves into believing that cocreation is a magic bullet that shoots down all problems associated with governing society and the economy. Cocreation may run into problems caused by the lack of political support, weak reflexive leadership, poor institutional design, shortage of funding, and unforeseen events such as natural disasters, wars, economic crisis, and political conflicts that prevent collaboration. Hence, some cocreation processes never get off the ground and others are aborted half-way.

Even in those cases where cocreation runs through the different phases and seems to make considerable inroads into solving some pressing problems, cocreation may encounter some structural problems that can only be avoided through careful countermeasures. In particular, cocreation may suffer from four problems (Brandsen, Steen, & Verschuere, 2018).

Cocreation is based on participation. If relevant and affected actors do not want to participate because they choose to ignore the problem at hand, are too busy, fear that they will not be heard, or rely on others to the work they should be doing, cocreation will be seriously crippled and may falter and wane. An additional problem concerns the question of who participates and what interests are served. Researchers talk about the risk of participatory selection bias, which means that strong and resourceful actors tend to participate more frequently and actively than less resourceful actors (Agger, 2012). Biased participation patterns may lead to predisposed solutions that undermine equity by serving the interests of the stronger actors at the expense of the needs of the weaker actors. Careful stakeholder analysis, commitment to diversity in participation, empowerment of

weak and vulnerable actors, or use of spokespersons and decision rules that give the weakest actors the right to veto joint decisions can mitigate and even remove the selective participation bias that if left untamed means that the stronger actors will become even stronger.

Cocreation presupposes that the different public and/or private actors will eventually agree on actionable solutions that solve urgent problems. However, encouraging participation of actors with different experiences, ideas, and interests creates a severe risk of unsurmountable conflicts that may lead to deadlocks and discourage future participation. The risk is particularly high when available solutions that create public value for society as a whole tend to produce costs and burdens borne by a particular group of actors and compensation schemes appear to be too expensive. Professional interest mediation and attempts to think outside the box and to create innovative solutions that distribute costs and benefits more evenly may reduce the risk of stalemate and foster a positive experience with participation in cocreation that encourages future participation.

Cocreation draws together public and private actors in a joint effort to produce solutions that have public value and are valued by the public. However, these good intentions are not always fulfilled. Hence, there is a risk that cocreation unintendedly leads to the codestruction of public value. There are different sources of such value codestruction. The cocreating actors may collectively ignore or overlook warnings against negative side-effects of the favored solution. They may also lack competence and skills enabling them to exploit emerging opportunities for solving hard-to-solve problems. Finally, there are examples of over-zealous vigilante action on the part of voluntary actors who want to "police" the behavior of local actors in order to ensure compliance with new rules and regulations, but end up provoking violence or hurting people, thus undermining the very solutions they wanted to uphold. Educating, training, and mentoring the leaders and entrepreneurs involved in cocreation, together with a high degree of transparency, may considerably reduce the risk of codestruction of value, but cannot eliminate it entirely.

This brings us to the last problem inherent to cocreation, which is the lack of democratic accountability that stems from the fact that cocreation arenas are not always transparent, making it difficult to see who is responsible for core decisions and deprive us of the usual ways of sanctioning bad governance such as refusing to vote for the elected government or imposing an economic sanction. When it comes to sanctioning cocreation that has resulted in a governance failure that could and should have been avoided, the only available tool is to "'name and shame" the participating actors. Although this tool maybe be necessary in some cases, it may not amount to much in terms of changing the behavior of the actors involved.

So, admittedly, there is a dark side of cocreation. However, being aware of the risks and taking precautionary and remedial action will help us to stay on the bright side of cocreation and to exploit its enormous potential to spur global change.

Conclusion

The SDGs express grand ambitions that mirror the huge problems that our social and natural environment currently faces. Those who may desire to contribute to this ambitious agenda may feel overwhelmed: It feels like climbing a mountain and it is understandable that some may prefer to quit or camp rather than face an insurmountable climb. This chapter has proposed that the only way to reach the summit is through orchestrating collaboration of manifold actors in networks and partnerships that can cocreate innovative solutions. The chapter has suggested that there are many benefits of using a cocreation strategy to achieve the SDGs, in line with the guidance of Goal 17. It has also identified some of the inherent risks in cocreation processes that might lead to less desirable outcomes. To reap the benefits of cocreation while avoiding the perils on the dark side, we need to explore localization strategies and institutional designs that can successfully scaffold cocreation processes (see Chapters 4 and 5). We also need to investigate the challenges that arise at different stages of the cocreation process, including initiation, design, implementation, and evaluation (see Chapters 6 through 12). Finally, we need to know much more about how cocreation processes can be led and managed to convene actors, facilitate collaboration, and produce effective solutions (see Chapter 13).

Chapter 4

Translating Global Goals to Local Contexts

Abstract

This chapter examines the translation of generic global goals into local action. It first discusses the translation of global goals into national agendas and the challenges of localizing the goals. Localizing the goals is essential for ensuring that the SDGs reflect local needs, norms, and values, thus ensuring that local actors find them relevant and meaningful. The chapter argues that cocreation is a key vehicle for the localization of the SDGs and identifies the key benefits that arise from using cocreation as a localization strategy. Cocreation can foster the will and capacity for local governments and communities to advance the cause of sustainability. Cocreation can help communities integrate the sustainable development goals, identify hidden resources, build support networks, create social accountability, etc.

Keywords: Governance by goal setting; global goals; national agendas; local needs; localization; cocreation

The SDG Cascade: From Global Goals to Local Action

The 2030 Agenda imagines nothing less ambitious than ending global poverty, fostering sustainable development and reversing the march toward the destruction of our natural environment. The fact that the world community was able to come together to agree on these 17 goals was miraculous. Yet looking back from the present day, the hard work was only just beginning in 2015, and the scorecard after the first decade of implementation reveals that we still have a long way to go.

The sustainable development goals (SDGs) represent a strategy of "governance by goal setting" (Biermann, Kanie, & Kim, 2017). The goals themselves are "legally nonbinding," and nations maintain a large measure of freedom in deciding whether and how to implement them. As a result, actual goal achievement depends on international, national, and local efforts to effectively translate global goals into action. Besides the basic need for political support and access to

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adequate financing, the SDGs demand a pattern of highly distributed collaboration – one that cascades downward from the global to the national level and then from the national to the local level.

The SDG cascade has received a great deal of careful attention by global policymakers and the 2030 Agenda has been praised for prioritizing the means of implementation of the goals. The UN Development Group (UNDG) has supported SDG implementation by developing "Mainstreaming, Acceleration and Policy Coherence" (MAPS) missions that promote widespread stakeholder consultation to inform implementation strategies. It has also created a "rapid integrated assessment" tool to help nations identify national readiness for SDG implementation.

In addition to this important work, cocreation can support the SDG cascade from global goals to national and local implementation. As argued in Chapter 3, this role for cocreation is already anticipated by Goal 17, which emphasizes partnership as a means of implementation. In particular, transnational multistakeholder partnerships are envisioned as potential mechanisms for translating global goals into local action. Although there are many types of partnership with agendas ranging from policy development to implementation, resource mobilization, advocacy, or operations, some of them come more close to what we refer to in this book as "cocreation."

Partnerships are not always effective (Pattberg & Widerberg, 2016). Research on partnerships finds that they are challenging to manage and that local groups, in particular, may lack resources to participate effectively (Banerjee, Murphy, & Walsh, 2020). Thus, it is important to understand where and how cocreation can support the implementation of the SDGs and to what effect.

Although cocreation can support SDG implementation at all levels of the cascade from global to local, it is a strategy ideally suited to the "localization" of the SDGs. The most challenging but rewarding work of implementing the SDGs often takes place at the local level where local governments interface with local businesses, civil society organizations, and citizens on very concrete problems. Localization of the SDGs requires that global SDGs be translated into local contexts in ways that make them appear recognizable, urgent, and meaningful. Highly general goals must resonate with concrete local problems and policy agendas and local communities must embrace and support the goals. The strategy for achieving the SDGs at the local level must not only be meaningful to local participants but should appear to be feasible in the local context.

From the Global SDGs to National Agendas

A first step in the SDG cascade is the formulation of national agendas for addressing the goals (Kanie & Biermann, 2017). Of course, even prior to 2015, nations had elaborate laws, institutions, and programs with relevance to SDG implementation. Many nations have therefore begun their implementation efforts by mapping how these existing laws, institutions, and programs align or misalign

with the SDGs and assessing whether new initiatives are necessary. Synergies and tradeoffs in national goals must be identified and national-level priorities, indicators, and benchmarks must be developed. A road map for achieving the SDGs is an important product of these efforts and can be essential for setting the framework for cocreation at both the national and local levels. Multistakeholder consultations have become a prominent feature of the development of national agendas, and these consultations offer opportunities for cocreation, particularly in the setting of national priorities.

Reviews indicate that participating nations have made planning efforts to align the SDGs with existing national laws and programs, and most have developed strategies for prioritizing the SDGs and for monitoring progress toward their achievement. Many countries have applied "policy-target alignment analysis" to identify supportive conditions for SDG implementation. Fewer countries, however, have made progress in mainstreaming the SDGs or in implementing those conditions (Allen, Metternicht, & Wiedmann, 2018, 2021). Research finds that even the most advanced countries on the SDG index – Scandinavian and Northern European nations – are making insufficient progress on implementation (Lanshina, Barinova, Loginova, Lavrovskii, & Ponedelnik, 2019).

While nations have been adept in aligning their efforts with existing laws, institutions, and programs, they have been less adept at developing new integrated strategies for achieving the SDGs and in devising evaluation strategies. They also vary in their ability to mainstream and implement the SDGs based on their own institutional strengths and political styles. Japan, for example, is excellent at visioning and goal setting, but weaker at incorporating local government in SDG efforts, while Indonesia has a weaker system for coordinating implementation and reporting but is more effective at integrating national and local efforts (Morita, Okitasari, & Masuda, 2020; Oosterhof, 2018).

As many commentators have noted, national governments prioritize some goals over others. Early analysis suggests that national governments cherry-pick the SDGs, basically stressing goals that align with longer-term agendas or institutional legacies (Forestier & Kim, 2020). Moreover, both developed and developing countries have tended to prioritize poverty and economic development goals over environmental goals. Although many countries indicate an appreciation for the transformational nature of the SDGs in their Voluntary National Reviews (Allen, Metternicht, & Wiedmann, 2021), cherry-picking of some goals over others threatens the whole-of-government approach to action and implementation implied by the SDGs (Banerjee et al., 2020). To meet the transformational promise of the 2030 Agenda requires greater integration and alignment of goals and action (Griggs, Nilsson, Stevance, & McCollum, 2017, p. 214).

National policymakers are encouraged to set priorities by considering the interaction among the SDGs, to create coherent and integrated policy, to beef up institutional capacity, and to engage in policy innovation. Much of the advice on how to approach the interaction of goals is technocratic and relies on various types of modeling excercises to identify opportunities for synergy. While such exercises are useful, integration tends to be problematic because it always takes

place in the context of highly developed institutions, communities, and political groups with their own distinctive agendas. This is not to say that existing institutions, communities, or groups are unmalleable and unyielding to modeling analysis. Rather this situation means that the work of integration must proceed *through* interaction, negotiation, and exchange of ideas between existing institutions and groups.

Many countries have used multistakeholder collaboration in their national SDG planning, but engagement with civil society has been much weaker (Allen et al., 2018; Siddiqi et al., 2020). Yet there is an opportunity and an imperative here. Governments seeking to mainstream and implement the SDGs can widen their perspective by engaging more directly with local-level institutions and civil society actors (Forestier & Kim, 2020). To do this is to work together on the development of indicators that measure progress toward the SDGs. National-level measures need to be more sensitive to how well indicators capture the impact of local efforts (Hansson, Arfvidsson, & Simon, 2019).

While the translation of the global SDGs into national plans is critical for success, so is the translation of national plans and priorities into local action. While national agencies have resources and expertise for undertaking the SDGs, their efforts are often concentrated and centralized in a limited number of organizations in capital cities at a great distance from the on-the-ground problems that call for SDG action. By contrast, there are millions upon millions of localities with resourceful and motivated actors who given the right impetus can greatly expand the resources and efforts to realize the SDGs. Hence, if successful, the translation of national plans and priorities into local action can multiply initiatives on many fronts at once. This multiplier effect explains the importance of localizing the SDGs.

The Achilles' Heel of Agenda 2030: Localization

Agenda 2030 aims to be transformational. Yet to be truly transformational, this agenda must be institutionalized at all levels of society – it must go beyond government policies and programs and become embedded as a wider societal agenda. To do that successfully requires wide engagement beyond national government institutions. For example, the Network of Mediterranean Engineering Schools (RMEI) succeeded in mainstreaming gender equality values by fostering collaborations that included not just ministers but also university, industry, and professional associations (Zabaniotou, 2020).

Although Agenda 2030 clearly expresses the value of partnerships, the partnerships that it has spawned often have feet of clay, in that they are not building strong links to local communities and civil society organizations (Jönsson & Bexell, 2020). In spirit, the partnership model – as embodied by SDG 17 – clearly signals a desire for bottom-up participatory governance. However, a review of partnerships associated with the SDGs found limited bottom-up participation and inclusion (Enechi & Pattberg, 2020). The limited resources and capacity of local

stakeholders to participate and perceptions of conflicts between local, national, and international agendas have made localization the Achilles' heel of the SDGs.

Ongoing processes of decentralization have contributed to making local action much more important in many countries (Herrera, 2019). Increasingly, cities have taken a leading role in fostering climate change mitigation and adaptation efforts, which are particularly important given growth and population density (Fenton & Gustafsson, 2017). Cities are focal sites that combine the scale, the agency, and the motivation to make major investments in collaboration for sustainability (Ofei-Manu et al., 2018).

A key challenge is that local SDG implementation is *multilevel* and *multisectoral*. Although implementation may be spatially localized, it is still often embedded in wider national or global flows of resources, ideas, and power and cuts across the boundaries of policy sectors. This multilevel and multisectoral interaction must be harnessed and accommodated in order to have successful local implementation. Local cocreation efforts are likely to be more successful when international organizations and national governments support the capacity of local network development and assist local stakeholders in organizing and knowledge development (Kauffman, 2016). Experience with earlier Local Agenda (LA) 21 processes found that local capacity is an important variable in achieving implementation success. Cocreation can help local communities to align the necessary resources and capacity and build the political support necessary for localization of the SDGs.

Although the concept of localization can refer both to translating global goals into national goals, or national goals into local goals (Jönsson & Bexell, 2020; Lanshina et al., 2019), we focus here on the latter. To date, SDG localization has had mixed success. An examination of Voluntary National Reviews of Asian and Pacific Countries finds that about half incorporated local governments into their SDG planning efforts, but the results were weaker in terms of giving local governments a more "holistic" role in the SDG process (Oosterhof, 2018). Moreover, a recent UN report indicates that local involvement with the SDGs remains nascent at best in many countries (Flores & Samuel, 2019).

Weymouth and Hartz-Karp (2018) suggest four key steps in engaging local governments and stakeholders:

(1) Develop an inclusive and participatory local process
(2) Establish a realistic local agenda based on evidence and public engagement
(3) Establish goals for implementing the agenda
(4) Monitor progress toward achieving local goals

A general condition for making all four of these steps work is that local governments and stakeholders must be able to mobilize sufficient resources, capacity, and political support.

The strategy of localization for achieving sustainability extends back at least to the UN's adoption of Local Agenda 21 in 1992 (Oosterhof, 2018). Local Agenda (LA) 21 encouraged local governments to work with their communities to develop

sustainability plans. Many point to both positive and negative lessons of LA 21. One valuable lesson is that these local processes are more successful when there are strong local champions who encourage their development (Barrutia & Echebarria, 2011). Another lesson is that these local processes are more successful when they are supported by higher-level governments, such that lower-level and higher-level governments coproduce outcomes (Barrutia & Echebarria, 2011; Fidelis & Pires, 2009). While LA 21 participation was intended to be broad based, its achievements were often quite limited in scope (Wittmayer, van Steenbergen, Rok, & Roorda, 2016). These findings suggest that it is important to develop strategies for scaling up positive results.

LA 21 raised a number of issues that vex all innovation projects. Conceived as a safe process for local governments – that is, one that supplemented but did not challenge existing local planning processes – it focused on new demonstration projects that did not encroach on local agendas or threaten local power (Wittmayer et al., 2016). As a result, however, these demonstration projects also had limited scope and impact (Geissel, 2009). In Germany, LA 21 initiatives produced few tangible results because they focused on relatively small projects at the margins of mainstream institutions and policies. In Portugal, weak local partnership development limited their long-term results (Fidelis & Pires, 2009). These findings indicate that it is important for the strategy of localization to secure support from existing local institutions in order to mainstream the SDGs into their policies and programs. A positive example come from Ghana, which has mainstreamed the SDGs into the local planning process by Metropolitan, Municipal, and District Assemblies to incorporate the SDGs into their medium-term development plans (Duah, Ahenkan, & Larbi, 2020).

The stress on the importance of localization reappears in the context of the Millennium Development Goals (MDGs). The MDG strategy of localization was criticized for being too closely aligned with the priorities of development agencies and leading donor countries and of neglecting national and local governments and civil society (Howard & Wheeler, 2015). Although national governments were signatories to the MDGs, there was a lack of broad-based ownership for implementing the goals.

Consequently, and as a way to seek legitimacy for the new goals, broad consultations were conducted worldwide from 2012 and onwards (Dodds et al., 2017; Kamau et al., 2018). These consultations concluded that inclusion of local stakeholders was important for building wide commitment to the SDGs. As a result, the SDG agenda focuses action on more local and integrated collaborative efforts and has provided a number of resources to facilitate "localization." One important resource is the *Roadmap for Localizing the SDGs*, a guide produced by a partnership between UNDP, UNHabitat, and the Global Taskforce of Local and Regional Governments. Paralleling the National Voluntary Reviews, the SDG Platform for Localization, *Local2030*, encourages Local Voluntary Reviews.

Lessons about localization can also be drawn from other international efforts. The results of the Millennium Ecosystem Assessment, for example, suggest that the management of social–ecological systems is more effective when multilevel

networks develop that can help integrate and bring to bear different information and perspectives (Berkes, 2009). This often means bridging between the scientific knowledge of experts and the lay knowledge of local residents. Such networks require coordination and facilitation across levels by agents who specialize in this process. Building support from local stakeholders is understood to be a critical aspect of localization strategies (Reddy, 2016), and many types of local civil society groups – including resident or neighborhood associations – can become involved in the localization of the SDGs (Abd Rahman & Yusof, 2020).

An example of successful bridging between levels comes from community forestry in Nepal. Although this initiative was created by national legislation, its effectiveness has been attributed to the active mobilization of an NGO called *Forest Action*. Concerned that the national government was undermining the community basis of forest management, *Forest Action* engaged in active participant research at the community level and advocated for the mobilization of communities. However, the point here is not just that communities need to mobilize, but that there needs to be top-down support for community-based mobilization as well. Another point is that community-based action does not just organically occur. It needs to be skillfully organized (Fischer, 2017).

An important challenge for localization is that awareness of the SDGs has been limited, particularly among citizens and nonstate actors. Studies have found weak awareness both in developed (Hege & Demailly, 2018) and less developed contexts (Jönsson & Bexell, 2020). Low levels of awareness of the SDGs have been an important barrier to the creation of multistakeholder partnerships at the local level (Banerjee et al., 2020; Lindborg, 2019). Informational campaigns can prepare the way for enhanced local participation.

Although politics, institutional capacity, and regulation present challenges everywhere to ambitious SDG implementation, in some parts of the world political corruption, limited fiscal, administrative and technical capacity, and weak regulatory oversight act as barriers to SDG implementation. Such conditions may also present significant barriers to effective community and citizen participation in SDG implementation. However, if designed in ways that are sensitive to these challenges, cocreation can support a strategy of SDG localization.

Cocreation as a Strategy of SDG Localization

Effective localization relies not only on translating global goals into local action but also depends on successful mobilization of local institutions and communities and the marshalling of resources, capacities, and commitments. We identify 10 ways that a cocreation strategy can support the effective localization of the SDGs.

Cocreation Can Contextualize the SDGs

A challenge for SDG implementation is that global goals, targets, and indicators must be translated in ways that make sense to local governments and stakeholders (Lindborg, 2019). The very universality of the SDGs makes it imperative to

translate them into locally meaningful strategies that respond to local issues (Akbar, Flacke, Martinez, Aguilar, & van Maarseveen, 2020). Otherwise, local stakeholder groups will be inclined to ignore global goals and to resist externally mandated policies and programs. Localization can thus be thought of as a strategy of contextualizing, customizing, or embedding global goals.

The local contextualization of sustainability strategies should not be conceptualized as a mechanical top-down process requiring local governments and communities to implement global agendas. Rather, it calls for a more interactive process that acknowledges the importance of social learning in goal adaptation (Rist, Chidambaranathan, Escobar, Wiesmann, & Zimmermann, 2007). Cocreation can facilitate this interactive process of contextualization, helping local stakeholders customize SDG strategies that work for the local community (Kauffman, 2016). The process of translating global goals into local action often involves rephrasing and reinterpreting the SDGs and integrating them with existing local agendas and narratives.

In many parts of the world, natural resources are governed by customary systems, and such systems tend to produce community ownership of resources (Segura, Molnar, & Ahuja, 2020). When legally reinforced, community-managed resource governance has been found to lead to effective resource management (Mistry et al., 2016). Cocreation has an especially important role to play in helping local communities incorporate the SDGs into these local resource management systems. The key element of cocreation as a strategy of contextualization or customization is that citizen and stakeholder groups have the opportunity to deliberate on how global goals fit with local agendas.

> *Contextualize the SDGs*: Use cocreation to contextualize global goals so that they reflect local needs, norms, and values in order to ensure that local SDG action is relevant and meaningful.

Cocreation Can Encourage Societal Ownership of the SDGs

Successful localization of Agenda 2030 will depend on fostering a sense of local ownership of the SDGs. However, this is not merely a matter of delegating authority or discretion for implementation to local governments. A more transformative and integrative commitment to sustainable outcomes is likely to occur with a more pervasive societal ownership of sustainability strategies. Survey evidence from Australia and the United States, for example, finds that citizens favor a "partnership" arrangement with local government over an arrangement where citizens are merely passive recipients of government-delivered services (Weymouth & Hartz-Karp, 2018). However, civil society generally looks to the government to initiate, coordinate, and support local collective action for SDGs (Banerjee et al., 2020). Cocreation can facilitate societal ownership of the SDGs by fostering these partnerships between government and civil society.

Effective mobilization and facilitation of local stakeholders is an important pathway to societal ownership of the SDGs (Biekart & Fowler, 2018). For example, a local peat restoration program sponsored by the Indonesian government discovered that trust building and community participation were the critical factors for ensuring local support, which ultimately led to the program's success (Moallemi et al., 2020). Support from local residents was also a crucial factor in the small community of Feldheim, Germany, which succeeded in transitioning to 100% renewable energy. The success of this program has been attributed to the fact that citizens and the local government developed coownership over the transition project (Young & Brans, 2017).

Many other examples of the importance of building societal ownership for sustainability projects can be found in different policy sectors and regions. For example, a land restoration project known as Farmer Managed Natural Regeneration has been used to address poverty and food insecurity while increasing environmental resilience. Cocreated with farmers from Niger, the project has proven to be a successful model of engaging local stakeholders in sustainable development (United Nations, 2020). Similarly, a codesigned and cocreated project among Vietnamese farmers increased their sense of ownership over the issues of climate change adaptation (Phuong et al., 2018).

Local projects sponsored by transnational partnerships often fail because they lack local legitimacy (Beisheim, Liese, Janetschek, & Sarre, 2014). Thus, establishing legitimacy with local stakeholders is essential for project success. A sustainability project in the North Rupununi region of Guyana (Project COBRA) engaged communities in participatory scenario-building exercises in an effort to develop community-owned solutions. A key lesson of this project was the importance of working with local leaders with high community legitimacy who were guided by their interest in supporting their communities (Mistry et al., 2016).

Cocreation may also build societal ownership by aligning local SDG action with existing national and local institutions. In many countries, indigenous traditions of collective decision-making align well with strategies of cocreation. Studies have found, for example, that more equitable development of water allocation can be achieved when cocreation strategies pair with indigenous traditions that already embrace deliberative decision-making (Herrera, 2019). Cocreation, however, can also be aligned with administrative structures. In Thailand, for example, citizen participation in local economic policy making was successfully organized in accordance with already established provincial, district, and subdistrict levels of government (Roengtam, 2020).

Build Societal Ownership: Use cocreation to encourage local communities to support and take responsibility for achieving one or more SDGs.

Cocreation Can Build Local Capacity for Change

One of the challenges for the localization of LA 21 and the MDGs was that local communities lacked the capacity to effectively carry out the global agenda. One of the advantages of cocreation is that it moves away from thinking about the community as a client or consumer or a mere beneficiary of externally provided goods. Instead, it envisions communities as competent and resourceful actors capable of effective action while simultaneously recognizing the potential for further empowering these actors to take part in sustainability transitions (Howard & Wheeler, 2015). For example, in Cape Town, South Africa, a Wellbeing Innovation Lab has built capacity by helping local residents become more skilled in analyzing community challenges (Habiyaremye, 2020).

Local capacity is built, in part, by cultivating active citizenship, and positive outcomes from citizen engagement have been found even in less democratic contexts (Gaventa & Barrett, 2012). However, it is important to recognize that citizen participation can also lead to negative outcomes where governments make citizen participation appear tokenistic, unrepresentative, or manipulated (Gaventa & Barrett, 2012, p. 2403). Such outcomes can even occur in democratic settings that encourage citizen participation, as they did in a smart city project in Trondheim, Norway (Gohari, Baer, Nielsen, Gilcher, & Situmorang, 2020).

A cocreation approach departs from some traditional citizen participation strategies in that it can lead to the development of joint power among stakeholders and across levels of governing (Rosen & Painter, 2019). In this fashion, cocreation can build capacity by facilitating the collective agency of communities. We caution, however, against thinking of cocreation as an organic process of community self-organization – one that occurs merely by removing the barriers to participation. A study of the development of nature-based solutions in several European cities (Hamburg, London, and Milan) via cocreation between local stakeholders and public authorities found that they need strong facilitation to make them work (Mahmoud & Morello, 2021). Facilitators – who can come from the public or private sector or from the local community itself – provide the supportive conditions under which effective cocreation can prosper (Hargreaves, Nye, & Burgess, 2008). For further discussion of convening and empowering partners in cocreation, see Chapters 5 and 6.

> *Develop local capacity for change*: Use cocreation to reenvision local affected and relevant actors as resources for and partners in SDG achievement.

Cocreation to Foster Social Accountability for the SDGs

The development literature has found that citizen participation not only builds an active sense of citizenship but also helps to ensure a degree of state accountability (Gaventa & Barrett, 2012; Newell & Wheeler, 2006). A study of a rural

development project in Indonesia found many challenges to the participation of marginalized community members, but also found that they were capable of engaging in productive deliberative contestation with local governing elites (Gibson & Woolcock, 2008).

Where citizen mobilization is specifically oriented toward holding governments and other service providers accountable for services and fiduciary responsibilities, it is often referred to as "social accountability" (Butler et al., 2020), which has been particularly important for health-related programs (Flores & Samuel, 2019; Nepal & van der Kwaak, 2020). Social accountability may take a number of specific forms, including citizen monitoring and social audits (Flores & Samuel, 2019; Saner, Yiu, & Nguyen, 2020; Thinyane, Goldkind, & Lam, 2018).

An EU-sponsored project – IMAGINE – offers an example of how cocreation might contribute to social accountability. This project seeks to support a sustainability transition in urban energy use and is premised on the idea that such transitions must work directly with local stakeholders and residents. Reviews of cities where the project has been carried out suggest that cocreation with local citizens has served as a check on local politicians when the politicians sought to limit or weaken the project (Richard & David, 2018).

Successful social accountability generally depends on the willingness of governments to engage with citizens and stakeholders (Butler et al., 2020; Danhoundo, Nasiri, & Wiktorowicz, 2018). It may be enhanced when these forms facilitate citizen oversight at different levels of government. For example, Tanzania's "Bwalo Forums" have helped provide social accountability at different levels by mobilizing citizen oversight across different levels of government (Butler et al., 2020).

Social accountability requires active mobilization of civil society organizations, which is essential for overcoming the limits of the knowledge of individual citizens (Mdee & Mushi, 2020). To achieve a collective citizen voice, social accountability also depends on the successful mobilization of diverse stakeholders. Local grassroots organizations are often important interlocutors in mobilizing these marginalized populations (Flores & Samuel, 2019), and even children have been found to fruitfully contribute to social accountability (Walker, Cuevas-Parra, & Phiri Mpepo, 2019). Collective mobilization can be supported by partnerships and social movements (Danhoundo et al., 2018) or institutions that support "multidirectional communication" (Butler et al., 2020).

It is important to acknowledge here, however, that there may be a tension inherent in the idea of initiating cocreation for the purpose of achieving social accountability. A study of German and French NGOs found that they were cautious about committing to partnerships with governments or the private sector because they are concerned that it will jeopardize their watchdog role and that their voice within the partnership might not be great enough to exercise accountability (Hege & Demailly, 2018).

Although cocreation may not take on the explicit form of a social accountability mechanism, it facilitates the collective mobilization, shared knowledge, and awareness that may be necessary to encourage follow-through on sustainability efforts. Indeed, while the concept of social accountability is sometimes

criticized as being limited to narrow "tactical tools' like scorecards, cocreation offers a more "strategic" approach to social accountability (Mdee & Mushi, 2020). For an extended discussion of cocreation, evaluation, and social accountability, see Chapters 11 and 12.

Create social accountability: Use cocreation to enable local communities to critically monitor, scrutinize, and respond to efforts to achieve the SDGs.

Cocreation Supports Learning and Knowledge Creation

Cocreation processes can be used to both solicit valuable input and support for sustainability from citizens and stakeholders, but can also foster prosustainability attitudes and behavior change among participants. In the area of sustainable consumption, for example, changing household routines are commonly stressful for residents, and transformative change often depends on social learning (Sutherland, Hordijk, Lewis, Meyer, & Buthelezi, 2014). Studies have shown that facilitated cocreation projects can produce the learning necessary to support behavioral change (Schröder et al., 2019). The creation of so-called "action teams" organized in the UK to address the production of household waste provide an example in the domain of sustainable consumption. These action teams produced important reductions of household waste of nearly 20%, and in some cases considerably more, while producing useful local knowledge that was shared among a large group of residents (Hargreaves et al., 2008).

Achieving the SDGs requires a great deal of knowledge production. Research on "citizen science" has mapped a number of ways that citizens can participate in the cocreation and coproduction of data relevant to SDG implementation. Such cocreated data can be used to provide basic information on critical issues (e.g., biodiversity or plastic pollution) and to monitor progress toward SDG implementation (Fritz et al., 2019). Capacity building for knowledge creation can help to build long-term support for transformational change (Ziervogel, Enqvist, Metelerkamp, & van Breda, 2021). Cocreating knowledge can facilitate mutual learning and trust, as shown in urban environmental projects in Berlin and Rotterdam (Frantzeskaki & Kabisch, 2016).

The cocreation of knowledge may take place early in the process of developing a response to the SDGs. For instance, in Douala Cameroun, cocreation was used to design a transdisciplinary workshop to address urban health issues (Weimann et al., 2020). A number of participatory approaches to knowledge generation are relevant to cocreation strategies. Participatory Rural Appraisal has demonstrated it is possible to engage local citizens and stakeholders in the cocreation of knowledge for rural development. Participatory mapping is a technique of collecting, assembling, integrating, and interpreting geospatial information based on community input, which is particularly useful where local data are scarce (Akbar et al., 2020). These types of knowledge cocreation often serve a dual mission –

they bring local knowledge to bear in a collective fashion by crowdsourcing community knowledge while also making this knowledge available to the wider community, thus spurring and informing action for sustainability.

Citizen participation in monitoring and evaluation of SDG progress can be one form of knowledge cocreation. Citizens can participate in the monitoring process since such monitoring based does not require sophisticated data analytics. For example, citizens have contributed to the monitoring of SDG indicators and an international survey found that Goal 4 (Quality Education), Goal 11 (Sustainable Cities and Communities), Goal 13 (Climate Action) and Goal 15 (Life on Land) were the most common targets for citizen monitoring (Shulla, Leal Filho, Sommer, Salvia, & Borgemeister, 2020).

Support learning and knowledge creation: Use cocreation to encourage local citizens and stakeholders to jointly share and create data and knowledge and engage in mutual learning about sustainability.

Cocreation as Bottom-Up Goal Integration

Cocreation can facilitate the types of community linkages that build SDG goal integration from the bottom up. As one interviewee put it in a study of local Irish SDG implementation: "The SDGs created possibilities for linkages between organizations in different sectors where maybe we wouldn't have thought about those linkages before […] it has created real opportunities for us to kind of maybe come together" (Banerjee et al., 2020, p. 7). For these organizations, the SDGs provided a reason to come together and to collaborate.

In the city region of Greater Geraldton in Western Australia, deliberative polls were used to solicit public views on sustainability challenges. Local politicians were surprised that the representative sample of residents who participated in the deliberative polls advanced an even more ambitious sustainability agenda than had been originally imagined by local government. What was notable about the agenda that emerged from the polls is how it broke down existing government silos in seeking to pursue several goals at once (Weymouth & Hartz-Karp, 2018).

Local partnerships and participatory strategies that support cocreation provide the potential for cross-sector problem-solving (Westman & Broto, 2018). For example, local participatory strategies inherent in "social forestry" have been found to help communities manage the tradeoffs between resource use, poverty amelioration, and environment sustainability (Hiratsuka et al., 2019).

Encourage bottom-up goal integration: Use cocreation to enable local communities to discover synergies between sustainability goals as well as to forge connections between otherwise siloed efforts.

Cocreation to Spot Leverage Points

Conflicts among local actors often run deep and are not easily overcome by a few workshop sessions. Facilitating a working consensus, much less transformative learning, can be an uphill battle, and those most inclined to support the kind of transformational changes necessary to achieve sustainability goals may also be the least empowered actors. Under these conditions, upending deeply entrenched unsustainable practices can be a major challenge. However, in this kind of situation, cocreation can be highly valuable as a strategy to identify opportunities for constructive change (Van Zwanenberg et al., 2018). When actors appear intractably opposed, a positive strategy for supporting movement toward sustainability is to identify "leverage points" – that is, points around which intervention in social systems are more likely to produce transformational change (Abson et al., 2017). Cocreation can be a strategy for engaging communities in identifying leverage points (Rosengren, Raymond, Sell, & Vihinen, 2020).

Spot leverage points for change: Use cocreation to identify opportunities for transformational change and to move entrenched practices.

Cocreation Can Build Support Networks

Research on participatory community building for sustainability finds that overlapping and reinforcing community networks are often crucial for supporting change even where it is difficult (Mistry et al., 2016). Cocreation can be used to help build prosustainability networks. For example, in the Western Cape, South Africa, a transformation lab or "T-lab" concept was used to engage local citizens in rethinking the local food system. In addition to supporting innovation, an important goal of the T-lab was to build relationships among a range of local actors who were working on food system issues in relative isolation from one another. The project succeeded in fostering the development of a new network of activists who engaged in the development of a food charter with the local government (Pereira, Drimie, Zgambo, & Biggs, 2020).

In this example, cocreation was used to construct new networks and prochange alliances, but it is often valuable or necessary to build on preexisting social networks, a process that may be particularly important in low-income neighborhoods (Gustafsson & Ivner, 2018). Organizing a new network or alliance may be difficult for some low-income residents, but they may be able to mobilize effective action by piggybacking on an existing network or alliance, persuading them to expand their agendas to include some of their key concerns.

Build support networks: Use cocreation to facilitate connections between change agents who otherwise might operate in isolation and forge alliances for change.

Cocreation Can Identify Hidden Resources

Cocreation can also be used as a strategy for identifying a community's hidden resources for addressing sustainability challenges (Lam, Zamenopoulos, Kelemen, & Hoo Na, 2017). This point is an addendum to the idea of using cocreation to build capacity, but it emphasizes that many skills and resources already exist without necessarily being recognized as useful or valuable for pursuing sustainability. Cocreation workshops can help stakeholders identify available resources and skills available either within their own community or externally (Bloomfield et al., 2018; Ziervogel et al., 2021).

Skills and resources are often hidden because citizens and stakeholders do not envision how these resources might be utilized, combined, or pooled to achieve sustainability goals. Cocreation can serve an arbitrage role of helping communities to identify opportunities for matching, sharing, pooling, and assembling community resources or tapping into existing external resources (Pelenc, Bazile, & Ceruti, 2015). A study of Chinese urban decarbonization partnerships, for example, found that they produce cross-sector relationships that are valuable both for problem-solving and for pooling resources and capacities (Westman & Broto, 2018).

> *Identify hidden resources*: Use cocreation to identify, enlist, and combine the many resources and skills that already exist in the local community.

Cocreation Can Support Local Innovation

In many cases, there is a need for low-cost, contextually appropriate innovations to produce sustainability, and an ambitious agenda of SDG localization should consider how it can unleash and harness a "plurality" of grassroots or social innovations (Pesch, Spekkink, & Quist, 2019). As stressed by research on sustainability transitions, these innovations often arise through the cultivation of multistakeholder collaboration, through the mobilization of local residents, citizens, and stakeholders, and through local codesign and cocreation (Echaubard et al., 2020; Smith & Stirling, 2018; Wittmayer et al., 2016). Cocreation of sustainability innovations appears to become particularly important as local innovations become more complex and effect more people (Maase & Dorst, 2007). By helping to create bridges between different agendas, cocreation can also facilitate the diffusion and scaling up of local innovations (Selvakkumaran & Ahlgren, 2018). For a deeper dive into cocreated innovation, see Chapter 7.

> *Support local innovation*: Use cocreation to stimulate collaborative innovation and build conditions for diffusion and scaling of innovative solutions.

Conclusion

To succeed as a strategy of "governance by goal setting," the SDGs need to cascade downward from the global to the national to the local level. In this chapter, we have identified "localization" as an Achilles heel of the SDGs and suggested that cocreation can serve as a central strategy of SDG localization. Fig. 4.1 summarizes the range of actionable lessons that we draw from cocreation as a localization strategy. Although many different approaches and strategies of cocreation are possible, the overall point is that cocreation can foster the will and the capacity for local governments and communities to advance the cause of sustainability.

Fig. 4.1. Cocreation as a Strategy of Localization.

Chapter 5

Building Cocreation Platforms

Abstract

This chapter explains how cocreation can be supported by establishing platforms, which provide knowledge, resources, and opportunities for local actors to come together in cocreation arenas. Platforms make it easy for local actors to connect, interact, and engage in productive joint activity. The chapter provides an overview of different types of platforms and describes their distinctive organizing logic, which includes mediating the relationship between different stakeholders, scaffolding their joint action, and leveraging their capacity for change. The chapter identifies important platform dynamics, such as attractor and amplifier effects, synergy, scaling, and social learning, that enable them to successfully support cocreation. Finally, the chapter discusses how platforms themselves can be designed to enhance these dynamics.

Keywords: Platforms; types of platforms; roles of platforms; platform tools; platform design; platform dynamics

All Hands-On-Deck: What Are Cocreation Platforms?

Platforms are relatively permanent, yet flexible, infrastructures that provide knowledge, resources, and organizational templates that local conveners can use when constructing, adapting, and multiplying temporary arenas for the cocreation of novel solutions. Sometimes, local governments or NGOs work with local conveners to create platforms that reduce the transaction costs of convening relevant actors and facilitate collaboration between them. At other times, central governments, international NGOs, or other more or less remote sponsors provide such platforms. In the latter case, local sponsors and conveners must work together to ensure the social embedding of the platform so that it is tailored to the local context. This section describes the basic architecture of cocreation platforms.

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A few decades ago, governments only resorted to collaborative problem-solving strategies when hierarchical and market-based strategies did not perform as expected. This has changed in recent years. Governments no longer regard collaboration as a last resort but tend to consider it an integral part of their strategic toolbox. The UN's recommendation of stimulating partnerships as a recipe for achieving the SDGs attests to this development. Since cocreation now tends to be a recurrent and increasingly popular strategy for public problem-solving, rather than a contingent one-off event, it makes good sense for sponsors to either build on, or make use of, collaborative platforms. This chapter will reflect on the design choices relevant to the construction of cocreation platforms.

Many sustainability developments must convene participants across both different policy sectors and between the public and private sectors, and platforms may play the role of facilitating the coordination of sustainable development efforts (Prescott & Stibbe, 2020). The concept of a "multi-stakeholder platform" originally grew out of work on natural resource management where effective management called for coordination and cooperation among stakeholders with different agendas. Cocreation platforms can also provide tools and organizing frameworks that help civil society to engage in sustainability efforts. For example, collaborative platforms might promote "participatory rural appraisal" strategies to aid local fishers in managing small scale fisheries sustainably (De la Cruz-González, Patiño-Valencia, Luna-Raya, & Cisneros-Montemayor, 2018).

Platforms promote connectivity, both horizontally among platform stakeholders and vertically across governing levels and scales (Prescott & Stibbe, 2020). They often play an intermediary or interlocutor role in cocreation (Fowler & Biekart, 2017). In a South African municipality, for instance, a *Raising the Citizen's Voice* project created a platform to encourage interaction between local citizens and government to improve water sanitation (Sutherland, Hordijk, Lewis, Meyer, & Buthelezi, 2014). Platforms can also help to facilitate arenas that bring participants together in ways that facilitate problem-solving and ease the costs of collaboration. By facilitating communication among an expanded network of community members participating in cocreation and by increasing access to wider range of community members, platforms can be understood to be performing what Kauffman (2016) calls a "network activation" strategy.

Platforms can also serve as incubators of change and governments can productively learn from the nonprofit and philanthropic sectors about how they may sponsor grassroots change efforts through the construction of platforms. The literature on collective impact, for instance, has found that so-called "backbone organizations" are particularly important for coordinating action between multiple parties (DuBow, Hug, Serafini, & Litzler, 2018). Whether as incubators or backbone organizations, cocreation platforms create the conditions in which self-organizing change can occur. Even research that focuses on grassroots (bottom-up) innovation recognizes that government can promote enabling conditions for innovation (Grabs, Langen, Maschkowski, & Schäpke, 2016).

Table 5.1. U.N. Platforms Related to the SDGs.

Platform	Central Activity Related to SDGS
The SDG philanthropy platform	Online collaboration platform to facilitate action among foundations and other funding organizations for SDG action
Sustainable development knowledge platform	Supports capacity development for achieving the SDGs and for conducting Voluntary Reviews
Partnership for SDGs platform	Encourages networking and partnership formation to advance the SDG agenda
Regional collaborative platforms	Bring together different U.N. bodies on a regional basis to support the SDGs
U.N. Global platform	Supports collection and use of big data for supporting the post-2015 development agenda
U.N. Global compact action platforms (in multiple areas)	Supports the SDG agenda by fostering sustainable business practices
Sustainable development solutions network	Mobilizes expertise to promote integrated solutions for sustainable development
Local2030	Supports localization of the SDGs
2030 agenda partnership accelerator	Supports the formation of multi-stakeholder partnership platforms, including training support in partnership development

As demonstrated in Table 5.1, the U.N. has been particularly prominent in supporting a range of important platforms with relevance to the SDGs. The U.N. distinguishes a number of types of platforms: *dialogue platforms* promote discussion and deliberation among stakeholders around particular problems and issues; *knowledge platforms* are designed to share knowledge and best practices in certain policy or technical areas; *reporting and standard-setting platforms* support the development of collective principles or standards for action and facilitate commitment or compliance with these principles or standards; and *transformative partnership platforms* facilitate coordinated action to achieve particular goals (Prescott & Stibbe, 2020).

Platforms can also create conditions that promote accountability, both vertically across governing levels and between different platform participants. In Guatemala, for example, a network of indigenous groups in 35 rural

municipalities created a platform to pool information about health service problems, thus enhancing their ability to hold health providers accountable for service provision (Flores & Samuel, 2019).

Platforms may operate at different scales. Many U.N. platforms operate on a global scale and promote collaboration on a national basis. Scaling Up Nutrition (SUN), UNDISDR's Platform for Disaster Risk Reduction, and UNDP's Green Commodities Program all support national or multi-national regional platforms (Beinsheim et al., 2018; Djalante, Holley, & Thomalla, 2011). The UNDP's Green Commodities Program, for example, creates national commodity platforms like Indonesia's platform for promoting the sustainability of palm oil production. This platform promotes efforts relevant to several SDGs, including gender equality, small producer livelihoods, and natural habitat conservation. The UNDP has facilitated the organization of similar programs in other countries – including platforms on cocoa in Ghana and pineapples in Costa Rica (Mintrom & Thomas, 2018).

While some platforms facilitate action on a global or national scale, many platforms have a local focus. Cities have led the way as local platform sponsors. In Kitakyushu, Japan, for example, the city created a platform called *Palette for the Future* in a bid to make it a world capital of sustainable development (Ofei-Manu et al., 2018, p. 378). With active support from the mayor and overseen by a multi-stakeholder steering committee, the platform promoted citizen participation in the development of the city's sustainable development plans. Similarly, Okayama City, Japan, initiated an Education for Sustainable Development project in 2005 that includes over 240 organizations (Didham, Ofei-Manu, & Nagareo, 2017). Sponsored by a partnership between the municipality and a Regional Center of Expertise (organized under the auspices of the U.N. University), this project built on existing community institutions (*kominkans*) that encourage local citizen participation and serve as an umbrella for several specific initiatives. A central strategy of this platform is to cocreate sustainability knowledge.

While some platforms are organized broadly around place, others focus on promoting sustainability in certain policy sectors. For example, in the Dutch city of Rotterdam, the *Concept House Village Lab* is a place for co-designing more sustainable building technologies with residents, while the *Blue City Lab* has sought to encourage cocreation initiatives around a "circular economy" and another innovation platform, *Mooi Mooier Middelland*, has sought to improve public spaces (Puerari et al., 2018). In the United Kingdom, *Newcastle City Futures* (NCF) has helped to facilitate a range of demonstration projects related to housing and transportation (Vallance, Tewdwr-Jones, & Kempton, 2020).

Types of Cocreation Platforms

Beyond these distinctions related to scale presented in the previous section, there are also a number of different types of cocreation platforms that have been

recognized. Although these platform types overlap in many respects, it is useful to distinguish them.

Knowledge Cocreation Platforms

Knowledge platforms serve as intermediaries between different stakeholders and focus on jointly creating and sharing information (Dlouhá, Barton, Janoušková, & Dlouhý, 2013). Environmental virtual observatories, for instance, collect and share data and provide analytical tools that encourage distributed cocreation of knowledge (Karpouzoglou et al., 2016). Knowledge-creation platforms may work together with citizen science to develop distributed data collection (Wilson et al., 2018), though such efforts can run into resistance or incentive problems (Wilson et al., 2018). Platforms can also take the form of collaborative research platforms for developing policy-relevant knowledge for sustainable development (Didham & Ofei-Manu, 2020). They may also pool information or knowledge from a network of similar organizations, such as watershed organizations (Medema et al., 2017).

Living Labs

Living labs have become a popular platform for sustainability, particularly in Europe (Compangnucci et al., 2021). As the name implies, living labs are understood to foster experimentation and innovation in real-world settings to develop solutions and strategies for sustainability. They have been used in a range of areas related to the SDGs, from aging and long-term care to energy conservation and tourism. For example, the Altona Mobility Lab focuses on sustainable mobility in Hamburg, Germany (Tatum et al., 2020).

The living lab movement explicitly adopts a strategy of cocreation (Haug & Mergel, 2021), with a focus on "having stakeholders either make or learn together, or both, in a single project or broader network" (Van Geenhuizen, 2019, p. 4). It focuses specifically on the cocreation of experimentation, though the actual degree of cocreation can vary significantly in different living labs (Menny, Palgan, & McCormick, 2018). An ambitious example of trying to scale-up living labs is the EU's UNaLab project, which has created living labs that focus on climate issues in 10 different European and non-European municipalities (Chronéer, Ståhlbröst, & Habibipour, 2019).

A specific type of living lab of relevance to the SDGs is the urban transition lab, which seeks to support the innovation necessary for sustainability transitions in particular urban areas (Nevens, Frantzeskaki, Gorissen, & Loorbach, 2013). Such labs are understood as helping to bring together the teams of actors relevant for sustainability innovation. A related idea is the transformation lab, which is conceptualized as creating a transformative space for "safe enough" experimentation that supports sustainability transitions by facilitating dialogue and interaction (Pereira, Karpouzoglou, Frantzeskaki, & Olsson, 2018, 2020). The ability

of living labs to encourage significant innovation depends on who is mobilized to participate (Voytenko et al., 2016).

Living labs have been primarily a local and an urban strategy, though nothing in theory limits them from operating at larger scales or in rural areas. They are also less common in developing countries but have made some inroads in these contexts where they are generally understood to be community platforms for enhancing knowledge cocreation for addressing community problems (Hooli, Jauhiainen, & Lähde, 2016).

Innovation Platforms

Innovation platforms bring together citizens and stakeholders for the explicit purpose of innovation. Perhaps the best-known innovation platforms focus on farmers and attempt to bring stakeholders (farmers, service providers, researchers, distributors, etc.) together across the value chain to introduce and develop innovative agricultural practices (Adekunle & Fatunbi, 2012). An important goal of these agricultural innovation platforms is to improve the livelihoods of small farmers – an agenda that supports the SDGs anti-poverty mission (Florini & Pauli, 2018). Other agricultural innovation platforms focus more on promoting sustainable farming practices. The *Better Rice Initiative Asia* (BRIA) takes on both goals – aiming to improve farmer livelihoods and to support sustainable rice farming practices. BRIA is affiliated with the *Sustainable Rice Platform*, which describes itself as a multi-stakeholder platform that collaboratively sets standards for sustainable rice production. Although agricultural innovation programs may be costly and vary in their effectiveness, they have a track record of promoting positive sustainability gains (Schut et al., 2019; van Ewijk & Ros-Tonen, 2021).

Smart City Platforms

Smart city platforms promote the possibilities of using the internet and digital technologies to improve the sustainability of cities, as well to achieve other urban objectives. They provide the institutional and technological frameworks in which smart city initiatives can be promoted and developed. Typically, these platforms actively promote citizen participation and cocreation and often focus on developing apps that can reduce energy use or improve service. Like Living Labs, they often support various types of experimentation (Matschoss & Heiskanen, 2017). Openness and transparency and partner alignment are found to be important success factors in successful cocreation on smart city platforms (Akterujjaman, Mulder, & Kievit, 2020).

Deliberation Platforms

Deliberation platforms typically encourage consultation with citizens, though they may also help to create the conditions of active citizenship necessary to promote cocreation (Fuster Morell & Senabre, 2020). For example, a German

consultation program – the *Mitreden-U Platform* – found that it received a surprising quantity and quality of submissions that led to new issues being placed on the sustainability agenda (Schulz & Newig, 2015). Online consultations like this can increase the number of citizens who can participate in sustainability processes over wider geographical areas. In the German city of Hamburg, a public forum called *Future Council Hamburg* has provided a platform to engage civil society around sustainability issues, and notably the SDGs (Krellenberg, Bergsträßer, Bykova, Kress, & Tyndall, 2019). Finland has been particularly advanced in integrating local participatory platforms into urban development issues (Anttiroiko, 2016).

Partnership Platforms

Partnership platforms help to facilitate the creation of partnerships for various purposes, including sustainability (Reid, Hayes, & Stibbe, 2015). For example, the Global Environmental Facility's *Small Grants Program Partnership Platform* and The United Nations' *Fund for International Partnerships* have actively supported the creation of partnerships to advance sustainability goals (Andonova, 2017). Partnership platforms often aim to encourage cross-sectoral collaboration between public and private actors (Selsky & Parker, 2010).

Sharing and Crowdsourcing Platforms

Sharing platforms enable citizens to share or exchange goods, tools, or services. They do not necessarily require cocreation and are perhaps better described as exchange platforms, but they often have elements of cocreation in their design. Under the leadership of Mayor Park Won-soon, the city of Seoul, South Korea has become a particularly vibrant example of developing a city-wide sharing platform (Moon, 2017).

Crowdsourcing platforms bring forth and aggregate ideas, funding, and activities. They may cultivate cocreation to a limited degree but may be important in supporting sustainability solutions. Crowdsourcing platforms like *OpenIDEO* in Detroit or *Give a Minute* in New York, Chicago, and Memphis have provided a framework for crowd-sourcing solutions to urban problems (Certoma, Corsini, & Rizzi, 2015).

This list of different types of platforms attests to the fact that platforms may have different purposes and designs. They all support cocreation to some degree but they vary in the extent to which cocreation is central to their operations.

The Organizing Logic of Cocreation Platforms

A key aspect of the organizing logic of cocreation platforms is that they make it easy for others to organize and pursue joint projects. They do this in several ways. First, platforms *enable connections* between citizens, stakeholders, and public authorities. They may do this by creating physical meeting places or by providing

digital tools that facilitate matchmaking and quick and easy two-way communication. Second, they *facilitate high quality interaction* between cocreators and between cocreation projects. They may do this by providing leadership and intermediation that facilitates high-quality group deliberation and problem-solving or by helping cocreators access and align their projects with available resources and authority offered by other projects. Third, platforms *provide tools or templates* – such as decision support or process management tools – that can be customized in specific settings and that make it easy for cocreators to carry out successful projects.

While platforms may play many roles, we suggest that they can play at least three crucial roles in facilitating action toward sustainability: intermediating, scaffolding, and leveraging. COVID-19 has been an eye opener about the importance of platforms that provide these different roles to support cocreation of solutions to pressing problems. At the same time, the pandemic has accentuated the value of digital means of communication and coordination over the use of face-to-face interaction in order to curb the spread of infection.

The Intermediating Role of Platforms

Platforms connect and mediate the relationship between different platform stakeholders. They typically work to forge productive interconnections between people, programs and ideas – a role that can be described as *intermediation* (Moss, Medd, Guy, & Marvin, 2009). In performing this role, they often strive to align action between local and higher levels of government or action (Perry, Patel, Norén Bretzer, & Polk, 2018) and they serve to bridge the divide between public and private sectors and different industry or policy sectors (Kilelu, Klerkx, Leeuwis, & Hall, 2011). This intermediating role is sometimes described as *bridging and brokering* (Crona & Parker, 2012). Platforms not only connect and broker between individual people but also between projects, organizations, and even entire networks (Kanda, Kuisma, Kivimaa, & Hjelm, 2020; van Lente, Hekkert, Smits, & Van Waveren, 2003).

As stressed in the literature on innovation platforms, platforms can play the role of innovation brokers. These brokers help to articulate the collective demand for innovation by convening appropriate discussions and envisioning exercises; they facilitate linkages between important stakeholders; and they help to align the actions and efforts of stakeholders to foster coordinated and effective action. Innovation brokers often need to maintain a certain degree of neutrality vis-à-vis participating stakeholders to ensure that their needs and ideas are being considered and respected. Platforms must often walk a tightrope between maintaining neutrality and moving the agenda forward and attracting funding from particular donors (Klerkx, Hall, & Leeuwis, 2009).

To play an effective intermediating role, it is important for platforms to be strongly embedded in the domain or sector in which they are operating – that is, to have strong connections to the relevant stakeholders. However, an interesting tradeoff may be present in terms of the degree of embeddedness in local contexts

(Haveri & Anttiroiko, 2021). Platforms with strong local roots may be highly capable of facilitating action among local stakeholders but will often be less able to bridge across levels, jurisdictions, and sectors. Conversely, more globally or nationally initiated platforms may be better at forging cross-boundary connections but may fail to draw the attention of local actors because knowledge of the platform and what it can do does not penetrate to the local level. Another possible tension is related to the degree that platforms monopolize the intermediation role. Many different actors may serve as connectors and brokers, roles that often develop in an organic, bottom-up fashion (Manning & Roessler, 2014). When platforms find that they have difficulty reaching out to and connecting a particular group of actors, they may find it effective to rely on other people or organization who can better serve this role (van Hille, de Bakker, Ferguson, & Groenewegen, 2020). For example, young people are often better than adults when it comes to mobilizing youth to participate in sustainability projects.

The Scaffolding Role of Platforms

Another key role played by platforms is to provide scaffolding that supports cocreation. This scaffolding often involves the provisions of templates that provide certain preestablished or preformed guidelines, strategies, and organizational forms that reduce the cost of communicating and organizing and help to sustain interaction of stakeholders over the lifetime of the project. These templates are particularly important where the costs of organizing are high and when enduring collaboration is necessary to achieve the desired results.

Some templates are designed to help organizers and participants to rapidly assemble effect project, campaigns, or strategies (Ansell & Miura, 2020). These templates are typically generic institutional frameworks that have proven useful in other places but that can be customized for specific uses. Templates may provide norms and routines for how to attract and recruit participants, how to organize day-to-day governance, and how to create ground rules that facilitate communication and interaction. They may also provide guidelines for how to initiate and conduct activities that advance common agendas and how to monitor and evaluate processes and results to improve performance and accountability.

Templates may vary in terms of how restrictive or flexible they are and to what degree they can be customized. Some templates operate like franchises with strict rules and demands for how local instances of cocreation should be organized (Ansell & Gash, 2018). Other templates may only consist of general organizational guidelines that may or may not be followed. In this case, local participants are free to pick and choose between different organizational ingredients and add new one. There is a tightrope to walk here between overly restrictive versus overly loose templates. Restrictive templates can undermine necessary customization to local conditions whereas loose or minimalist templates can fail to provide the necessary scaffolding of cocreation processes.

One of the most common and important forms of platform scaffolding is the organization of workshops. By organizing processes of cocreation using a

pretested template, workshops can help participants identify opportunities for collaboration and innovation. Workshops are learning-based interactions that bring stakeholders together to engage in creative activities. They are an essential and common strategy for facilitating intensive communication among stakeholders with a view of exploring possible solutions to common problems. Strategies of effective facilitation of cocreation workshops need to be sensitive to the different situations and starting points of diverse communities (Amenta et al., 2019).

Workshops require the creation of neutral spaces while also being mission-driven. To satisfy both needs, they must strategically mobilize relevant stakeholders, connecting them and enabling them to work together. To do so, it is important to bring different stakeholders up to speed by providing a common baseline of knowledge and information. Likewise, it is important to identify resource complementarities and patterns of interdependence among stakeholders. In the early stages of cocreation, workshops can help stakeholders to *see* the value of working together, perhaps by helping them achieve early "small wins."

Workshops often introduce various tools to assist participants in the cocreation of new ideas (Sanders & Stappers, 2014). For example, participatory mapping can create a shared object (the map) that becomes a basis for communication and knowledge-sharing, which can in turn reveal possibilities for more ambitious projects (Akhar et al., 2020). Participatory mapping for Dengue control in Cambodia found that the mapping process itself created new community relationships and knowledge and the maps themselves became the basis for improved control interventions (Echaubard et al., 2020). Design methods also offer many possibilities for cocreation workshops (Jones, 2018). Such methods include "geodesign" that often works interactively with mapping approaches (Moura et al., 2020). Scenario planning, visualization, and role playing can all be used to facilitate stakeholder communication and brainstorming (Akoglu & Dankl, 2021; Quist & Vergragt, 2000; Segelström & Holmlid, 2009).

The Leveraging Role of Platforms

A key feature of platforms is that they try to make tools available to facilitate common action among a broad range of actors (Ansell & Miura, 2020). A broad range of tools and strategies can be used by platforms to facilitate the mobilization and organization of relevant stakeholders to advance sustainability. Two important types of tools include participatory planning and modeling tools that both assist actors to expand their capacity to analyze situations and make effective decisions. Participatory planning tools allow local stakeholders to investigate different future scenarios that help to understand issues related to sustainability decision-making (Fuldauer, Ives, Adshead, Thacker, & Hall, 2019). Modeling tools allow stakeholders to explore a range of sustainability options at low cost and to evaluate how different strategies may produce synergies in relation to different SDGs (Moallemi, 2020). As shown in Table 5.2, there is a range

Table 5.2. Platform Tools for Facilitating Cocreation.

Platform Tools for Facilitating Cocreation	**Description**
On-line training	On-line training programs may help to build capacity for pursuing SDG goals (Bloomfield et al., 2018).
Decision support tools	Decision support tools, such as the sustainable value mapping and analysis methodology (Winans, Dlott, Harris, & Dlott, 2021), or Adaptation support tools (Van De Ven et al., 2016), can provide systematic support for multi-actor decision-making.
E-participation tools	ICT can support "e-participation" that in turn facilitates cocreation (Szarek-Iwaniuk & Senetra, 2020).
Process management methodologies	Process management methodologies typically provide an ordered process of engagement around specific collaborative tasks. Examples such as the Life Cycle Co-Creation Process (LCCCP) have been developed to support stakeholder engagement (DeLosRíos-White, Roebeling, Valente, & Vaittinen, 2020).
Digital design and fabrication tools	Fab labs provide tools that allow cocreation around digital design and fabrication (Fleischmann, Hielscher, & Merritt, 2016).
Planning Support tools	Some planning support tools are interactive (such as "maptables") and facilitate working together on planning issues (McEvoy, van de Ven, Santander, & Slinger, 2019).
Serious games	Serious games can be used to foster communication and social learning among stakeholders (Jean et al., 2018).
Simulation and scenario modeling	Simulation and scenario modeling may be very useful for modeling the interactive effects of different factors on SDGs (Allen, Metternicht, & Wiedmann, 2017; Collste, Pedercini, & Cornell, 2017).
Qualitative system models	Qualitative systems models like iModeler may be useful for working with stakeholders (via stakeholder modeling workshops) to develop

Table 5.2. *(Continued)*

Platform Tools for Facilitating Cocreation	Description
	analyses of the interaction of the SDGs (Neumann, Anderson, & Denich, 2018).
Conceptual methodologies	Some concepts and tools, such as water footprints (Berger et al., 2021), can be used to help communities understand and track their use of scarce resources.

of other and more specific tools that can empower joint inquiry and decision-making.

Such tools may facilitate cocreation processes. For example, an interactive platform supporting low carbon housing in Tampere, Finland has provided civil society with communication tools to support building coalitions (Kabisch et al., 2019). Other tools may help stakeholders engage in planning, design, or implementation. Planning support tools, for example, provide analytical frameworks for developing improved planning processes. While these tools have generally been found to strengthen participation in planning, they still remain somewhat exploratory (Flacke, Shrestha, & Aguilar, 2020). Moreover, they need to be "fit for purpose" in the local contexts in which they are deployed (Jiang, Geertman, & Witte, 2020). A general finding is that facilitation is often needed to make generic tools useful to communities, particularly if they represent complex or unfamiliar technologies.

Essential Dynamics for Platform Success

Platforms need to make it easy for others to connect, interact, and engage in productive joint activity. In this section, we investigate more deeply what it takes to do that. In very broad terms, platforms are relatively lean institutions that rely on soft rather than hard power to steer interaction processes. Thus, platforms tend to be more successful when they can leverage or mobilize action in ways that create positive experiences and opportunities for platform participants.

One important platform dynamic capitalizes on *attractor effects* – the notion that "success begets success." This idea suggests that platforms need to be strategic about building up momentum and interest by carefully targeting opportunities for early successes. Strategically engaging citizens and stakeholders in ways that produce wider interest or awareness, or that are entertaining, enjoyable, or fulfilling, can stimulate attractor effects. Attractor effects may also be encouraged through thoughtful intermediation that produce immediate benefits to participants or through the provision of tools that create interest, motivation, or commitment, among stakeholders.

A second and related dynamic is the importance of discovering and exploiting *synergies* because gains from bringing skills, resources, and authority together can provide important positive advantages. For platforms, finding and developing synergies is often a matter of strategic intermediation that helps to facilitate connections and exchange between different parties who bring different resources, skills, and perspectives to the table. In a cocreation context, the mobilizing power of platforms can encourage the discovery of possible synergies or reduce the transaction costs for citizens and stakeholders. Platform tools may illuminate the interdependence between stakeholder goals and thus foster the exploration of possibilities for mutually beneficial outcomes.

The third dynamic is the pursuit of *amplifier effects* – that is, where the outputs of cocreation are much greater than the inputs that individual participants originally invested. Such effects often depend on the ability of platforms to make low-cost generic templates and tools available to distributed user groups, who can then customize them for their own specific agendas and context. However, amplifier effects may also be produced when groups cocreate frameworks, products, or strategies that can be imitated or appropriated – in part or whole – by other groups.

A fourth dynamic, often closely related to both attractor and amplifier effects, is *scaling*. Platforms often achieve positive outcomes by making it possible to scale up certain solutions, programs, or agendas in relatively flexible or low-cost ways in order to enhance their usage and impact. For example, a generic cocreation tool can be used in many communities at once. Through effective intermediation, platforms can also facilitate connections between stakeholders at much larger scales.

A fifth and final positive dynamic is *social learning*. By encouraging cocreators to learn from and about one another, new possibilities for fruitful exchange and cooperation may appear and galvanize participant interest and motivation. The scaffolding power of platforms is fundamental for encouraging social learning that rarely develops in the absence of structured dialogue among different stakeholders. Platform scaffolding and intermediation can facilitate dialogue and reduce the transaction costs of social learning.

The five positive platform effects easily translate in to recommendations for changemakers who take on the task of developing cocreation platforms as a means of tackling the SDGs. Table 5.3 summarizes our recommendations.

Platform Design

As these positive dynamics suggest, platforms need to be designed so that they enhance stakeholder motivation to engage in cocreation. Studies of agricultural innovation platforms have found that the distance people must travel to participate can affect their motivation (van Ewijk & Ros-Tonen, 2021) and that farmers are more motivated to participate when immediate benefits are clear (Mulema & Mazur, 2016). Motivation is also partly internal to the platform's operation, i.e., motivation to participate is partly the result of how platforms strategically

Table 5.3. Recommendations for Achieving Positive Platform Effects.

Platform Dynamics	Recommendations for Action
Attractor effects	Build up momentum and interest among stakeholders by making it easy and rewarding to participate and by strategically targeting opportunities for early successes that demonstrate the value of cocreation
Synergy	Look for opportunities to connect stakeholders with complementary resources, skills, and perspectives and make sure that stakeholders feel that their distinctive assets are being put to good use
Amplifier effects	Make low-cost generic templates and tools available to participants that allow them to achieve tasks and goals beyond their initial expectations and investments
Scaling	Use generic tools and templates to extend platform action to many different locations and sectors to maximize the overall impact
Social learning	Create opportunities for social learning among different stakeholders by sponsoring workshops and other forms of structured dialogue that allow them to engage in cross-frame reflections and question tacit assumptions

design and lead cocreation. To produce positive effects, platforms typically need dynamic leadership and supportive champions among participating stakeholders. They must also operate in a flexible, adaptive fashion that is tolerant of failure and supportive of entrepreneurial action.

While motivation is partly internal to the operation of the platform, it is important to recognize that it is also shaped by outside forces, i.e., in ways that may be partially beyond the control of the platform or its participants. A series of workshops aimed at addressing social and water sustainability issues conducted in an Indian village provide an example of the interplay between internal and external forces. After several workshop meetings the motivation of villagers began to decline. The reason was that they could not figure out how to effectively engage the local village government (an external factor). With some degree of support and facilitation by a group of researchers, the villagers reorganized themselves as a farmers' *sangha* (or community) and promoted their work as a demonstration project in sustainable farming practices that would be useful for the entire community. This strategy (an internal factor) strengthened the motivation of participants to carry on with the project (Rist, Chidambaranathan, Escobar, Wiesmann, & Zimmermann, 2007).

The degree of participation in platforms may vary considerably, with some participants becoming much more committed and engaged than others. It is important to recognize that differential participation may place undue workloads on some participants, which can be problematic if this labor is contributed voluntarily (Rist et al., 2007). Research suggests that it can be difficult to extend a sense of ownership beyond a core circle of participants to a more casually participating outer circle, though the setting of cocreation may itself be an attraction for potential participants (Puerari et al., 2018).

An important point is that positive effects are central to how platforms work, but they must operate within concrete political, social, and economic contexts that will make these effects more or less practical. The Rockefeller Foundations 100RC program has created a network of cities working on climate resilience, providing member cities with financial support for a Chief Resilience Officer, a methodological framework for organizing their resilience projects, support for accessing the tools and services from a wide network of NGOs and private firms, and support in sharing their knowledge about projects and activities undertaken. A lesson from research on the 100RC program suggests that a challenge for activities is that they must navigate complex local politics (Bellinson & Chu, 2019).

Another challenge is that platforms may be instrumentalized for the purposes of certain elites or political parties (Rist et al., 2007). Platforms that primarily serve the interests of platform sponsors, as opposed to users, are less likely to encourage successful civic participation (Menny et al., 2018). A related tension is that less inclusive participation may enhance innovation processes in some cases, but more inclusive participation may enhance broader-based ownership and legitimacy of innovations. As intermediary institutions, platforms tend to work only if they have both higher and lower-level support (Djalante et al., 2011). As a result, how they connect different scales of governing is an important consideration (van Ewijk & Ros-Tonen, 2021).

To facilitate collaborative design and problem-solving, platforms often need to be aligned to the local policy context (Waardenburg, Groenleer, & De Jong, 2020). The political embeddedness of platforms in local communities is important and platform leadership must therefore be sensitive to political and social context (Biekart & Fowler, 2018). While externally organized platforms confront tightly cohesive local communities, they may confront significant resistance. Knowledge-creation platforms, for example, can be regarded as threats to local community experts (Rist et al., 2007). The key to this challenge is to find ways that platforms can empower or add value to local communities. In Korea, for instance, a knowledge platform sponsored by the local sustainability alliance was embraced because it provided a conduit for local sustainability commissions to provide input into national sustainability discussions (Oosterhof, 2018).

Platforms must deal with inequality and differences in the power of participants and must design participation arenas in ways that accommodate these inequalities and differences (Menny et al., 2018). Research on innovation platforms has found that such power differentials can limit platform effectiveness (Cullen, Tucker, Snyder, Lema, & Duncan, 2014). However, a study of two New

Zealand agricultural innovation platforms found that they provided opportunities for less resourced or powerful actors to stage conflicts with more resourced or powerful actors. This staging of conflict can make inequalities more visible and become a basis for stimulating change (Turner et al., 2020).

What this brief analysis of platform dynamics suggests is that platform designers should carefully consider the possible positive and negative effects of different designs on the promotion cocreation of sustainable solutions.

Conclusion

As a strategy for advancing the SDGs, cocreation has bubbled up in many nations and policy domains but remains a relatively limited and ad hoc strategy for advancing Agenda 2030. Platforms provide a strategy for promoting sustained cocreation efforts on a grander scale and they serve a critical support function in promoting the sustainability agenda. Notably, they can serve to integrate across different sustainability goals, connect actors with different skills, resources, and perspectives, incubate innovation and change, and ensure alignment across levels of governing.

There are many possible specific platform types, and they may operate at quite different scales – global, national, regional, and local. We identify three roles that platforms typically play in the production of cocreation: first, they serve an intermediating role between stakeholders and between levels of governing; second, they scaffold cocreation processes by providing templates that can reduce the cost of organizing; and third, they provide tools that empower citizens and stakeholders to advance their own agendas. Through these three roles, platforms create a powerful basis for scaled-up cocreation.

None of this happens without careful strategic action on the part of platforms and their designers. Platforms typically achieve their mobilizing effects through realizing a variety of positive dynamics – via attractor, synergy, amplifier, scaling, and social learning effects. Achieving these effects requires effective platform leadership that is sensitive to political context and that pays great attention to the motivation of citizens and stakeholders to participate in platform-sponsored cocreation. Like all social institutions, platforms require investment and work to realize their potential. But with proper leadership and the right design, platforms can greatly extend the power of cocreation to advance the sustainability agenda.

Chapter 6

Convening, Empowering, and Integrating Relevant and Affected Actors

Abstract

This chapter explores how conveners can use stakeholder analysis to bring together and align relevant and affected actors in cocreation partnerships. Next, it considers how conveners can deal with the limits to the inclusion of all relevant and affected actors. Reflections on the relation between inclusion and exclusion of actors are followed by a discussion of how conveners can empower weak, vulnerable, and inexperienced participants. Empowered actors must be motivated to participate in complex and demanding cocreation processes. The key motivator is to be found in the efforts of conveners and facilitators to clarify, strengthen, and create resource interdependence between the participants. The last section looks at the emergence of different kinds of conflicts and the role of conveners and facilitators in mediating conflicts that threaten to jeopardize the cocreation process.

Keywords: Convening actors; stakeholder analysis; empowerment; effective participation; integration; conflict mediation

Convening Relevant and Affected Actors to Participate in Cocreation of Public Solutions

Once a collaborative process for cocreating SDG solutions has been enabled by platforms and/or designed in ways that will allow sustained interaction, changemakers will have to identify potential participants and motivate them to join the collaborative endeavor – i.e., they must convene the actors who will cocreate sustainability solutions. The salience of the problems and goals in question, their resonance with local agendas and experiences, and the way they are framed by local conveners are important factors for getting the attention of potential

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participants and arousing their interest in participating in cocreation. However, it is not enough to broadcast good and noble intentions to cocreate solutions to one or more important SDGs; the conveners will have to work hard to proactively mobilize and commit local actors and get them on board.

The conveners themselves may constitute a small group of actors who know each other well and share the commitment and urge to solve pressing problems. They may even have worked together on a previous occasion. Sometimes there is just one single brave and passionate convener calling for collective action and hoping that other actors will join in. No matter how many conveners there are, the big question is: who to invite into the cocreation partnership? The simple answer is that they should aim to bring together relevant and affected actors. The relevant actors are those public, private, and third sector actors who possess important knowledge, skills, and resources, and thus can contribute to understanding the problem and designing and implementing a solution. The affected actors are those who, in addition to skills and resources, have valuable experiences with existing problems and solutions or will feel the impact of new solutions, and thus can help to identify local needs.

Conveners may want to put together a dream team of actors with different knowledge, skills, and resources. Like a sports coach, they want to select a team consisting of players each of whom possesses much-needed competences and together have all that is needed to succeed. Hence, if you want to convene a partnership for transition to sustainable farming based on new and varied crops, organic fertilizers, and improved irrigation, you may want to recruit actors with insights into local traditions and conditions, agricultural visions and ideas, updated scientific knowledge, connections to local farmers, and access to funding and finance. Actors infused with creativity, courage, stamina, and collaborative spirit will be valuable additions to the team. The list of required resources, skills, and human qualities varies from case to case. Hence, the main rule for conveners is to let the problem or challenge at hand define who the relevant and affected actors are. A careful problem analysis and a survey of possible solutions will help to determine the type of resource- and skill-bearing actors that are needed to establish a winning team that successfully solves the problem at hand.

Some actors will be obvious participants and may not require much persuasion as they are highly interested in participating, but the group of relevant and affected actors possessing the skills and resources to ensure goal attainment extends beyond the more limited group of self-selected actors. So the question remains: who else to invite? Stakeholder analysis is a useful tool in answering this question. It aims to identify relevant and affected actors, map their interrelationships, and discover higher-level agendas and goals that may attract important actors and create a partnership between them. The analysis may be boiled down to three crucial analytical steps (see Eden & Ackermann, 1998; Ackermann & Eden, 2011; Bryson, Patton, & Bowman, 2011, but in particular Bryson, Cunningham, & Lokkesmoe, 2002).

The first step simply lists local stakeholders, including regional, national, and international stakeholders with a local presence, using the "power versus interest

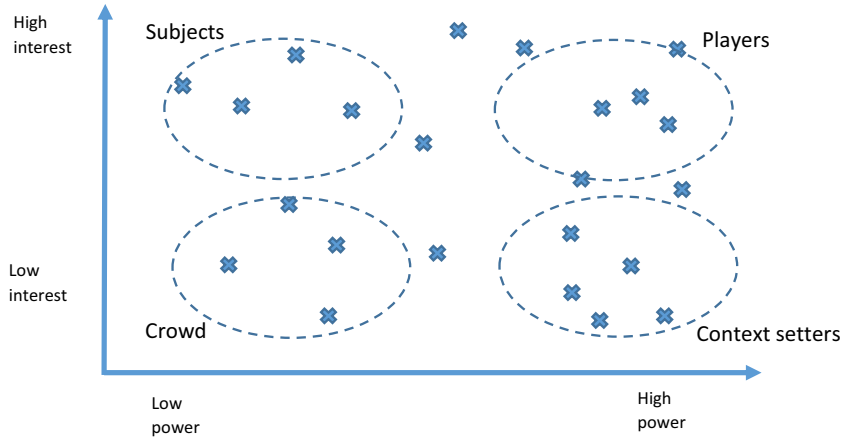

Fig. 6.1. Power Versus Interest Grid. *Source:* Adapted from Bryson et al. (2002, p. 572).

grid" shown in Fig. 6.1 to array the stakeholders according to their varying degrees of interest in solving the problem at hand and varying degrees of formal or informal power and influence that enables them to do something to solve the problem.

The power versus interest grid permits the conveners to identify four types of actors: (1) *subjects* who have a high interest in solving the problem, but little power and influence; (2) *crowd* actors who neither are interested in problem-solving nor have any power; (3) *players* who both have interest in problem-solving and lots of power; and (4) *context setters* who also have power but little interest in the problem. In order to ensure effective and successful cocreation, conveners must seek to form an alliance between players, context setters, and subjects. The players are both motivated for and capable of driving change, but they need to engage with context setters in order secure funding and supportive regulation and they need to involve actors from the group of subjects to make sure that the solution is feasible and targets real needs.

The second step consists in establishing which actors are related to and influence other actors. As indicated in Fig. 6.2, where the arrows signify influence, this analysis seeks to identify clusters or networks of actors that are intensely related to each other and more or less separated from other clusters. It also allows identification of central actors who tend to influence other actors.

Conveners of cocreation should aim to recruit and connect actors from different clusters or networks in order to mobilize a broad set of resources and prevent conflicts between different interest coalitions. They should also make sure that the cocreation partnership they are trying to form includes some of the central actors capable of influencing other actors in the field.

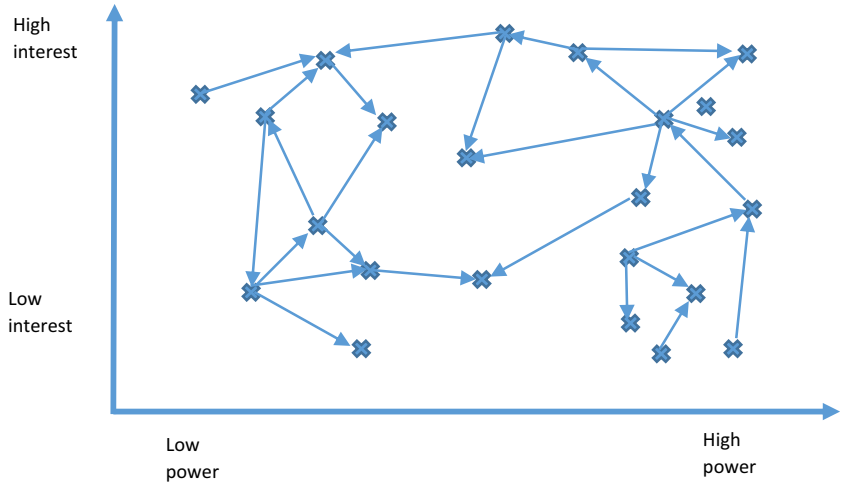

Fig. 6.2. Stakeholder Influence Analysis. *Source:* Adapted from Bryson et al. (2002, p. 574).

The final step in stakeholder analysis is to identify the different goals of the stakeholders. This move is important since interests formulated as goals tend to drive action. Each of the stakeholders will typically subscribe to a number of different goals in relation to the problem at hand and, typically, there will be many shared and overlapping goals. By linking these shared and overlapping goals into a set of higher-level goals and agendas, it becomes possible to construct a common ground for bringing together a diversity of actors into joint action.

It is good idea to spend time doing a proper stakeholder analysis to recruit the "right" actors in the cocreation partnership. However, if there is a shortage of time and resources, the formal and somewhat demanding stakeholder analysis presented above may be skipped in favor of a more intuitive approach that asks three basic questions:

(1) How can we create a broad alliance between actors who are interested in solving the problem, have the means to do it, and can influence the context?
(2) Who are the central actors and how can we involve them in cocreation?
(3) How can we formulate a broad agenda and some broadly defined goals that are shared by most if not all of the actors that we want to recruit?

Even a brief, informal chat among the conveners to reflect on these three questions will help ensure that key actors are linked by a common purpose that will help to trigger cocreated change.

New research confirms the value of stakeholder analysis for identifying and linking actors to drive toward sustainability. Kismartini, Roziqin, Purnaweni,

Prabawani, and Kamil (2020) used the power-interest grid to investigate the participation of key stakeholder associated with Indonesia's Special Economic Zone policies and its relationship to environmental concerns. The analysis finds that without inclusion of both interested and powerful actors, the prospects for policy implementation would be limited. Another study using the power-interest grid to study women empowerment in India found that wide inclusion of communities and networks was paramount for success (Wakunuma & Jiya, 2019).

Coping With the Limits to Inclusion

While stakeholder analysis is indeed a useful tool for populating partnerships for the cocreation of SDG solutions, it may produce a very long list of potential participants that are all deemed relevant, affected, and perhaps even central to the endeavor. Studies show that cocreation thrives on inclusion (Wakunuma & Jiya, 2019). Additional actors may bring fresh ideas and extra resources to the table and will become part of an alliance supporting the implementation of new solutions. Nevertheless, there are limits to inclusion.

First, there is a *coordination challenge*. Both logistic coordination and internal communication tend to become more difficult when the number of actors increases. Finding a suitable time where everybody can meet gets harder, the meeting facilities must be bigger, digital meetings get more complex, giving everybody a chance to speak and be heard becomes challenging, and the risk that some participants fail to receive important information increases.

Second, there is the *conflict challenge*. An increasing number of participants means that there are more opinions, interests, and veto points to take into account when trying to get the actors to agree on a joint solution. As such, highly inclusive networks and partnerships with a large number of actors may have difficulties realizing their collaborative advantage due to the rise of conflicts and tensions that create stalemates.

Third, there is the *troubling actor challenge*. In all collaboration, there is the thorny question about whether to include or exclude actors who are known to be very loud, arrogant, and antagonistic. Is it best to include such actors in order to integrate and neutralize them and prevent them from causing havoc from the outside, or is it better to exclude them so that they do not spoil the collaborative process and block decision-making on the inside?

Conveners must deal with all of these challenges. The coordination challenge can be dealt with by operating with different levels of participation. Some actors may form part of the inner circle of entrepreneurial actors who are driving the cocreation process forward and participating in all activities. A larger group of involved actors may play an active role and participate in plenary meetings in most or all of the crucial stages of the cocreation process. An even wider group of interested actors may be recruited as participants in work groups aiming to tackle a particular problem on an ad hoc basis. Finally, all relevant and affected actors may be continuously informed about important activities and perhaps consulted about key issues. Here, digital technologies that facilitate online participation may be particularly useful. Distinguishing different levels of more or less intense participation helps to facilitate the participation of a relatively large number of

actors without having too many participants in the cockpit where problems are defined and solutions designed and tested. Fig. 6.3 shows how different groups of people can be members of different spheres of more or less intense participation.

Cocreation arenas with different levels of participation are inclusive because they allow large numbers of actors to participate, but they are also exclusive as some actors are excluded from the inner circle. Getting acceptance of this arrangement from all those who want to participate requires a high level of transparency and a steady stream of communication from the inside out. The participants in the outer spheres of participation may not need information about everything, but should be informed of all major decisions and events.

The conflict challenge may be dealt with by creating an early agreement about the problem definition and the overall goals. By creating a common ground for solving the problems, later conflicts and tensions can be reduced to minor disagreements about the means and tools. Should major conflicts arise, mediation and conflict resolution is called for and if that is not enough, the conflicting parties may be separated through process design that places the combatants in different meetings, work groups, etc. (O'Toole, 1997). Finally, if segregation does not work either, the last option is to exclude the most uncompromising actor(s) from the joint decision-making process.

The troubling actor challenge poses a real dilemma as both inclusion and exclusion may turn out to be the right or wrong solution and a third option hardly exists. Nevertheless, conveners may try to involve a loud, arrogant, and antagonizing actor in either an internal working group where the damage caused by

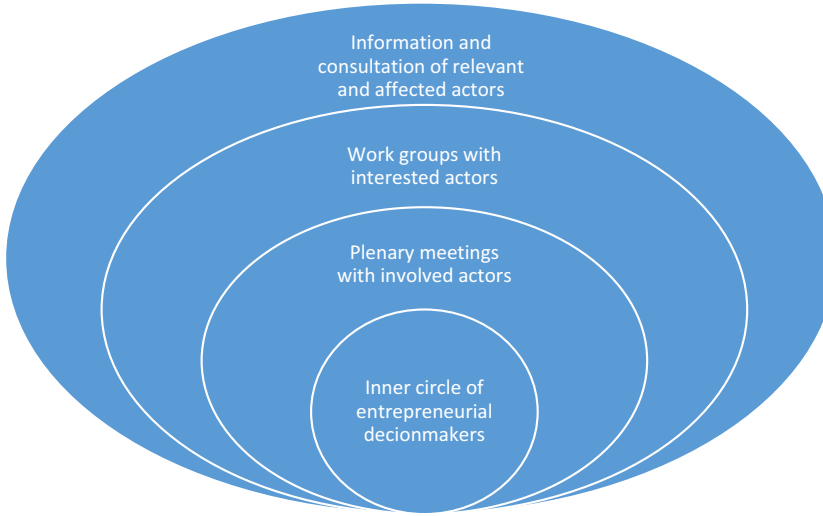

Fig. 6.3. Different Spheres of More or Less Intense Participation. *Source:* Adapted from Straus (2002).

abrasive behavior is limited and manageable or an external advisory board where blunt and critical comments can be tolerated because there is no obligation to follow suit. Such a tentative "third option" seeks to reduce the risk of including troublesome actors by including them on a limited basis (see also, Johnston, Hicks, Nan, & Auer, 2011).

Until now we have discussed inclusion and exclusion of actors as if it was a discretionary decision of the conveners alone. However, there are many examples of self-exclusion. Strong public, private, or third sector actors might want to go it alone because they believe other actors will weigh them down and make progress slow. Civil society actors may fear that their independency will be compromised by working closely together with state actors and private companies. Small organizations may not have enough staff to engage in cocreation. Citizens may be too busy or suspect that they will not have much influence. Finally, actors with limited resources or status may fear to be steamrolled by the stronger actors in a partnership. Since self-exclusion deprives the cocreation arena of valuable perspectives, the conveners must work hard to persuade reluctant actors to join the network or partnership. They may not get on board from the beginning, but may be drawn in later on when they can see that cocreation matters.

This brings us to the last point: inclusion and exclusion of relevant and affected actors in cocreation arenas is dynamic. Participants may come and go. In fact, they may not need to participate in all phases of the cocreation process. Some actors may be more useful in the design phase where input is needed to define the problem, whereas other actors may contribute to the implementation of new solutions or help to evaluate outcomes. Straus (2002) recommends using a "process map" that clearly specifies which actors should participate in which part of the cocreation process. Some actors may even be persuaded to participate in cocreation if they can see that they do not have to be part of the entire process. That being said, it is important to have a core group of actors who participate throughout the cocreation process in order to ensure continuity and progression and keep the focus on the overall goals.

Empowering Actors to Secure Effective Participation

Cocreation aims to make use of the different experiences, ideas, and resources of the participating actors to create innovative and pragmatic solutions. Managing and exploiting the differences between public, private, and third sector actors, including different groups of citizens, presuppose that all these actors can participate effectively in the sense of understanding the agenda, introducing themselves, flagging their competences, grasping the main points from presentations, engaging in debates, believing in their own ability to influence decisions, and maintaining a close connection with the group or organization they represent. This presupposition of effective participation does not always hold in reality as key social, political, and economic resources are unevenly distributed across the participating actors due to a combination of socioeconomic inequalities, differences in social and political group status, and varying experiences with

participation in the past. Actors may be strong in many personal respects, while lacking the experience, knowledge, and resources necessary for effective participation in cocreation. In order to level the playing field and give all actors a fair chance of being heard and influencing joint decisions, the conveners must seek to empower the weaker actors and remind the stronger actors that they may marginalize or scare off less resourceful participants if they fail to make room for their valuable contributions. To avoid marginalization and defection, stronger actors must also learn to restrain themselves and curb their temptation to muscle their way through joint decisions. In other words, conveners must use different tools to address and mitigate resource asymmetries in order to facilitate effective participation and fruitful collaboration.

Empowerment is a capacity-building activity that aims to enable actors to "gain mastery over their affairs" (Rappaport, 1987). It refers to actions, interventions, and conditions that enable individual or collective actors to achieve a desirable outcome such as effective participation that allows them to have influence over the results of cocreation (Hölscher et al., 2019; Perkins & Zimmerman, 1995). Empowerment strategies may operate at the societal, group, or participant level. Let us take a brief look at the different empowerment strategies while paying special attention to participant-level strategies.

Building capacities for effective participation by means of empowering weaker actors requires social and political action at a *societal level*. Most important strategy for societal empowerment is the persistent attempt to reduce socioeconomic inequalities by means of enhancing shared prosperity, creating jobs in an inclusive labor market, and building social welfare systems that can help cover basic social needs. Economic crises tend to enhance social inequalities while access to jobs is a key to enhancing social equality. Social welfare programs help to cover basic needs and enable people to look ahead and become involved in activities aiming to build a better world. If they are tax-financed, they may have a large redistributive effect. Other important empowerment strategies at the societal level are the efforts to extend civil, political, and social rights through political reforms and to remove group status hierarchies based on tradition, religion, gender, ethnicity, prejudice, etc. Empowerment is strengthened by improving the formal and informal conditions for speaking up, organizing action, expressing new ideas, and improving the livelihood of poor segments of the population. Finally, we should never forget that (civil) war or local acts or threats of violence may deprive particular sections of the population of a voice either because they are fleeing from unsafe conditions or feel intimidated. Hence, peace-keeping efforts are a crucial societal empowerment strategy (Williams, 2013). It goes without say that local conveners of cocreation cannot use these societal-level strategies to empower the participants in a particular partnership. Not only do these strategies only produce effects over the long term, but they are also typically a matter for national government. The local partnership may, however, pursue and realize SDGs that support one or more of these societal empowerment strategies.

Group level empowerment strategies may be pursued by regional or local governments and gain support from local conveners of cocreation. An important

strategy involves efforts to recognize communities and groups and raise their status in public discourse. Community-raising efforts may include celebration of local culture, festivals displaying local music, historical accounts revealing the origins of local people and customs, and establishment of cultural, hubs, centers, and consciousness-raising activities. Another important strategy is to support the self-organization of local communities and the creation of self-help groups by offering advice about establishing and running community organizations, creating meeting spaces and training local leaders (Suguna, 2006). A study of women's empowerment in India shows that involvement in local self-help groups enabled women to have a voice in community affairs and enabled them to tackle problems such as the lack of drinking water and electricity and access to health services (Umashankar, 2006). A final strategy is to devolve the responsibility for public tasks to local communities and groups to improve their self-confidence and build local governance capacities. While local conveners can neither initiate nor drive these group-level empowerment strategies, they may persuade local or regional governments, or perhaps international donor organizations, to run empowerment projects targeting local communities and groups.

Participant-level empowerment strategies can be deployed at will by local conveners and facilitators to ensure effective participation in cocreation partnerships. An overview of the many different strategies is provided in Table 6.1.

Conveners and facilitators using one or more of these empowerment strategies to ensure effective participation for all the involved actors face the challenge that intentional empowerment strategies may unintentionally disempower some of the participants. For example, inviting a group of less resourceful, vulnerable, or inexperienced participants to a premeeting taking place in an official government building or in the headquarters of a large international donor organization may disempower the participants by bringing them into a formal and foreign setting that oozes of power or wealth and thus make some of them feel uncomfortable and alienated.

Another paradox in relation to empowerment of participants in cocreation processes is that, in some cases, the stronger actors have to be "disempowered" relative to the weaker actors in order to level the playing field and enhance effective participation. The disempowerment of the stronger actors does not involve stripping them of their knowledge, competences, and resources that eventually will benefit the cocreation process. Instead, it involves changing the rules and procedures governing interaction in cocreation arenas so that the stronger actors are forced to restrain their exercise of power and give more room for weaker actors to express their opinions and influence decisions. There are many facilitation tricks that aim to disempower the stronger actors relative to the weaker actors and they all tend to disrupt the standard format of meetings where people sit around the same table and the most resourceful actors dominate discussions. One trick is to begin a discussion with a silent brainstorm where all participants think about an answer to a question and some of the weaker actors get to report their ideas before the rest of the participants are asked whether they have additional input. Another trick is to make a round in plenary discussions so that everybody has an equal opportunity to speak and be heard. A third trick is to

Table 6.1. Overview of Participant-Level Empowerment Strategies.

- *Collaborative platforms* may provide access to relevant information, advice and knowledge, and perhaps offer online or face-to-face training sessions that prepare local actors for collaborative work in a particular area
- *A premeeting* with weak, vulnerable, or inexperienced participants can help bringing them up to speed with what is going to happen in the meeting and informing them how they can contribute to the process
- *A postmeeting* with the same group of actors will help them to debrief and create an opportunity for answering questions about future meetings and actions and responding to eventual frustrations
- *Trust building* through the creation of spaces for informal social interaction where participants get to know each other on a more personal basis, use of presentation rounds that allow participants to gauge each other's beliefs and intentions, and formation of joint rules that prevent opportunistic action will make less resourceful, vulnerable, or inexperienced participants more comfortable with participating
- *Facilitation of meetings* that gives everybody a chance to speak up and encourages discussions in small breakout groups where the participants feel more secure and where the risk of internal exclusion or sidelining is mitigated
- *High speed information sharing* in the initiation phase helps level the playing field by providing the participants with the same basic knowledge about problems and possible solutions
- *Mentoring* that pairs weaker, more vulnerable, or less experienced participants with stronger, confident, and knowledgeable actors can pass on valuable skills, tips, and tricks that support effective participation
- *Selective activation* that prior to a meeting or event solicits a small and easily provided input from a passive and insecure participant may give them a positive experience that leads to more active participation
- *Distributive leadership* that lets disempowered actors solve small yet important tasks, applauds their achievement, and encourages them to do more will serve to raise their self-confidence and efficacy
- *Frame reflection* allows all participants to comment on and evaluate the way that the collaborative process is framed, organized, and conducted in order to ensure that everybody feels comfortable with the procedures.

use walk-and-talk to elicit ideas from small groups with a well-balanced composition or simply to hold meetings while walking through a town or rural area and where either problems and/or possible solutions become visible. A last trick is to make joint decisions by creating a "solution gallery" where all the different actors can walk around and look at the different solutions displayed on the wall and add their evaluative comments and perhaps cast votes prioritizing the solutions they like the most.

Fostering Collaborative Relations Through Motivation and Integration of Actors

Once the relevant and affected actors have been identified and effective participation is ensured through empowerment of the weaker actors and 'disempowerment' of the stronger, the key question becomes how to motivate and integrate the participants in order to spur collaboration and joint problem-solving. Most actors will be motivated to participate by the noble cause and the anticipation of the gains flowing from solutions to pressing problems. Still, the participating actors need to be convinced that they can do more by working together than working in parallel or going it alone. In fostering collaboration, the clarification, strengthening, and perhaps even creation of resource interdependencies are of great importance (Kooiman, 1993). Interdependence refers to the actors' recognition that they are dependent on each other's resources, competences, knowledge, support, etc., in order to carry out a particular task or solve a problem. A private contractor aiming to introduce fractioned garbage collection in a major city needs financial support from the municipality and perhaps an investor, technical support from experts and industrial designers, and input from local citizens and neighborhoods to judge feasibility and gain support for implementation. Local citizens aiming to fight hunger by planting crops and buying livestock financed by microloans need backing from community leaders, financial institutions, public authorities, and international donor organizations. The government of Sao Paulo must solicit ideas, resources and support from civil society organizations, residential representatives, local businesses, and urban planning experts in order to find ways of legalizing Favelas and getting the residents to pay for water and electricity. Finally, an international NGO aiming to reduce plastic pollution in the Indian Ocean needs permissions from public authorities, scientific knowledge possessed by marine biologists and oceanographers, ideas and willingness to change behavior from fishermen's organizations, operational support from regulatory agencies controlling rivers spilling out into the ocean and business firms interested in the circular economy. None of the public, private or third sector entrepreneurs can go it alone. Hence, they will all be looking for additional leverage and collaborative advantage (Huxham & Vangen, 2013).

While changemakers aiming to spur cocreation of SDG solutions may have a keen eye for mutual resource dependencies, the actors that they want to engage in collaborative problem-solving may not have any understanding of the need to

exchange or pool resources in order to change the world for the better. This situation calls for:

Clarification of the mutual relations of resource dependence by means of pitching the need to solve a pressing problem to relevant and affected actors and asking them to help map the resources and competences that are present in the room and are needed to solve the problem at hand. Such a clarification of resource interdependencies may identify resources and competences that are uniquely possessed by single actors, shared by several actors or not possessed by any of the participating actors, thus generating a need to recruit additional participants.

Strengthening of resource interdependence either by storytelling that aims to rehearse past examples of successful collaboration and demonstrate how in the present situation the special contribution of different actors can help produce desirable outcomes that none of the actors could deliver on their own, or by encouraging some of the participating actors to specialize in what they do best now that they have access to resources and competences held by other actors.

Creation of resource interdependence by means of rewarding collaborative problem-solving either by making the formation of a partnership based on interdependency and risk-sharing a condition for getting access to public funding or by making acceptance of cocreated solutions dependent on the active contribution and support from relevant and affected actors.

Clarifying, strengthening, and creating resource interdependence between different actors helps to motivate them to exchange or pool their resources by means of sharing information, coordinating actions, and working together to define problems and design and implement solutions (Sørensen & Torfing, 2009). In short, interdependence is the key to spurring collaboration.

This conclusion should not lead us to believe that interdependence is the only driver of collaboration in the early phases of cocreation. In addition to societal factors, such as turbulence that calls for new and stable solutions alleviating the stress felt by social and political actors, and institutional factors, such as traditions of collaboration and platforms that attract people and make it easy for them to collaborate, there are three things that conveners and facilitators can do to spur collaboration.

First, they can *build trust* between the participants and in the fairness and efficiency of the collaborative process (Vangen & Huxham, 2003). The former is basically a matter of spurring social interaction between the participants so that they get to know each other, understand each other's reasons for participating, and slowly begin to trust that the other participants are prepared to collaborate, share their knowledge and resources, and respect the outcomes of joint deliberation. The latter is very much a question of involving the participants in defining the set of rules, norms, and procedures that helps to overcome power asymmetries, find and implement fair solutions, and share the benefits they produce and the prestige and honor of having produced them.

Second, they can aim to produce *hedonistic effects* by ensuring that the participants get positive feedback from participating in collaborative interaction (Tuunanen, Lintula, & Auvinen, 2019). Hedonistic effects can be obtained by

letting the participants use their skills and competences and become recognized for their contributions, giving everybody the possibility to express and assert themselves, staging creative processes that generate new exciting insights and ideas, and spurring transformational learning and personal growth based on empowerment. Hence, the more the initial encounter with collaboration can foster enjoyment among the participants, the more attractive it will be for them to participate.

Last, yet importantly, they can go for *small wins* that harvest low-hanging fruits in the early phase of collaboration (Termeer & Metze, 2019). Achieving and celebrating small wins helps to demonstrate the positive value and impact of collaboration and creates enjoyment and fulfillment among the participants. It may also attract important actors that the conveners had failed to recruit in the first round because they were skeptical about the possibilities of bringing about the change needed.

Mediating and Mitigating Conflicts

Despite persistent attempts to motivate and integrate actors participating in cocreation processes, conflicts will eventually emerge. Conflicts are struggles or contests between two or more actors who mobilize and apply different means of power to gain the upper hand, enhance their influence, and ultimately defeat the opponent (Himes, 1980). The means of power deployed in conflict stretch from soft measures to harder strategies, thus ranging from appeals to common values, to persuasion based on different combinations of argumentation and manipulation, to bribes and neutralizing concessions, and finally to disobedience, propaganda, provocation, protest, threats, and acts of violence.

Collaboration and conflict are inseparable elements of cocreation. Actors may collaborate nicely with each other to find a solution to problems such as persistent malnutrition, the suppression of ethnic minorities, or the degradation of nature before suddenly finding themselves in conflict with each other. The conflict may start as a simple disagreement about something important. If the actors cannot agree to disagree, leave the issue aside and move on; the disagreement may develop into a conflict where at least one actor perceives that some other actor frustrates a key concern of hers (Thomas, 1992).

Disagreements and conflicts are inevitable since there is no rational, correct, or perfect solution to complex problems that are characterized by unclear and uncertain problem diagnoses, inherent goals conflicts, and lack of well-tested standard solutions. The actors are collaborating and trying to make joint decisions in a terrain that is full of paradoxes, dilemmas, and hard choices. Neither arguments based on reason, passionate appeals to core values, nor the integrity of scientific expertise will manage to produce unanimous consent and thus leave open a space of dissent, disagreement, and conflict (Laclau, 1990).

Some conflicts are rooted in differences of opinion or judgment and may be constructive because they force the involved actors to reconsider their positions or revise and sharpen their arguments. This process tends to stimulate mutual

learning and may improve performance and spur creative problem-solving (De Dreu, 1997). Other conflicts are rooted in diverging identities, basic beliefs, or socioeconomic interests and may undermine attempts to construct a common ground for joint problem-solving and actionable solutions. Such potentially destructive conflicts cannot be prevented because they are inherent to cocreation processes. It is dangerous to try to avoid or suppress them since that might create intolerable tensions and dormant volcanoes may explode and cause havoc later on, and they cannot be resolved unless they are superficial and created by misunderstandings and miscommunication that can be cleared up. As such, conveners and facilitators are left with no choice but to engage in conflict mediation.

The immediate goal of conflict mediation is to reduce tensions and turn antagonistic conflicts in which the conflicting parties view each other as "enemies" to be defeated into agonistic conflicts between "adversaries" who compete for influence, but play for the same team. The final goal of conflict mediation is to foster some kind of accommodation, compromise, or agreement between the conflicting actors (DeChurch & Marks, 2001). In so doing, the conveners and facilitators become mediators who intervene in conflicts in order to create a settlement.

If one of the conflicting parties is not overly frustrated by what appears to be a strong concern of the other party, conflict mediators may opt for an *accommodation* strategy. Here the conflict mediator tries to get the least frustrated party to satisfy the other party's wish in order to keep the peace, break a deadlock, and proceed with the joint effort to solve a pressing problem. Accommodation is a loose/win solution as the accommodating party loses and the accommodated party wins. Because of the asymmetrical distribution of costs and benefits, the conflict mediators may consider using side-payments to compensate the loser. Promising the accommodating actor some fringe benefit or a stronger influence on a particular matter often helps this type of conflict mediation along.

An illustrative example comes from land protection in the state of Colorado in the United States. Population growth in the state was exerting increased pressure on open land, farm land, and wild life habitat, thus strengthening popular demands for state-wide land protection. However, this demand was countered by strong political concerns about maintaining private property rights, preserving the ability to find local solutions and preventing "overregulation" of land use. The conflict was solved through accommodation as the politicians approved the establishment of a Trust financed by a dedicated funding mechanism that enabled local governments and nonprofit land protection organizations to purchase, enhance, and protect land (Steelman, 2010).

If the key concerns of the conflicting actors are mutually exclusive and none of them is prepared to accommodate the other's concern, conflict mediators may try to strike a *compromise* through a bargaining process in which the conflict mediator play the role of a neutral arbiter. The conflict mediators will meet with each of the actors separately and with all of them together in order to explore the possibility that the actors will meet each other half-way and accept a compromise obtained through give-and-take bargaining. Since both of the actors will have to make concessions, compromise formation is a lose-lose solution. Both parties

have to give up something. However, if more protracted deliberations are ruled out due to severe time constraints, compromise formation between the combatants provides a good alternative to brokering an agreement.

A good example of conflict resolution based on compromise comes from the protection of an endangered species, the desert tortoise, in the state of Nevada in the United States. Housing development in the region around Las Vegas was threatening the habitat of the desert tortoise and environmental groups successfully listed the tortoise as an endangered species. This status led to a halt of any further development on potential tortoise habit. The conflict between developers and environmentalists was ultimately resolved by setting aside high-quality tortoise habitat while allowing development on lands of lesser habitat quality. Both parties had to compromise to reach a workable solution (Ansell, 2011).

If the positions of the conflicting actors are not totally steadfast, or are conditioned on facts, norms, and understandings that are questionable, conflict mediators may aim to settle the conflict through an *agreement*. Agreement is here defined, not as the presence of a shared opinion, but as the active process of coming to a mutual decision that is satisfactory to all parties. Getting conflicting actors to reach an agreement on a contentious matter requires that the conflict mediator find a way of changing the perspectives of the conflicting actors through a reframing of the problem. If the actors can come to see the problem from a new and joint perspective, there is a good chance that they might find a new way of thinking about their goals, ideas, and preferred strategies that either makes them change their views or creates a synthesis between what previously appeared to be mutually exclusive opinions. Agreement is a win-win solution that can be obtained through joint fact finding missions, perspective exchange, or reframing.

An interesting example of conflict mediation through the fostering of agreement based on reframing comes from the Blackfoot watershed in the state of Montana in the United States. Ranchers and environmentalists were at odds about the future development of the watershed. However, after a period of conflict, leaders from both sides came together and reframed the conception of their relationship to one another by stressing their common commitment to the place where they both lived. This reframing allowed the development of a joint strategy for both protecting and using the watershed. Thus, their roles were transformed from adversaries to neighbors (Weber, 2009).

Alignment of public, private, and third sector actors participating in a cocreation process can be viewed as an attempt to foster an early agreement. It involves the creation of a common problem definition, formulation of some overall goals and a joint vision, and efforts to encourage the participants to adjust their interests, strategies, and actions so that they are consistent with the common agenda. A common experience is that alignment is stimulated by external opposition and threats to the collective endeavor and goal attainment of the participating actors. Enemies aiming to prevent or block the cocreation of particular SDG solutions will tend to have the unintended effect of getting the participants to close ranks and align themselves vis-à-vis the antagonizing force (Laclau, 1990). Reference to "an external enemy" trying to undermine and ruin it

all and stop progress helps to rally and unify the actors in cocreation by providing a common lens through which they gauge their own aspirations.

It is no easy task to act as a conflict mediator who aims to resolve disputes in a cocreation arena. As a conflict mediator, you are often involved in the conflict or have particular sympathies that you have to conceal to do the job. In addition, you may need a particular mindset that basically tells you that a solution to the problem exists, but just hasn't been found yet. Finally, on the more practical level, conflict mediators may benefit from following the recommendations listed in Table 6.2.

The challenge when seeking to mediate or settle conflicts in cocreation arenas is to avoid creating situations where one or more actors will lose face by openly going against their own stated preferences and interests. Changing one's position is in itself painful, but it is doubly painful if it happens in public and the actor who is making a concession is scorned by those she claims to represent. To avoid that from happening, three conditions for successful conflict mediation must be met. First, the cocreation arena must provide a learning environment in which all ideas, positions, and interests are considered as provisional and contingent on available knowledge and input, thus being open to revision. Second, plenary

Table 6.2. Behavioral Recommendations for Conflict Mediators.

(1)	Choose the time and place carefully to create a situation where the conflicting actors are receptive, relaxed, and open to mediation
(2)	Do not do act until you have calmed down if you are upset or agitated
(3)	Pay attention to your nonverbal messages and use your body language to signal openness and avoid defensiveness
(4)	Always try to agree on something whether it is the overall or more specific goals, basic values, the strategy, concrete methods, or some important facts
(5)	Restate the issue, as you see it, and ask for feedback from the conflicting parties
(6)	Ask the conflicting parties what they feel about the issue and ask them not to second-guess each other
(7)	Listen actively by paraphrasing what the other person says and create space for corrections
(8)	Examine your part in the conflict by considering how something you may have done has contributed to it
(9)	Ban generalizations such as "you always…," or "I never…" from the conversation and encourage the actors to stick to the issue at hand
(10)	Brainstorm possible solutions and choose the best alternative that gets support from the conflicting parties.

Source: Adapted from IFAA Strategy (1976).

discussions should be based on the Chatman House rule that says that after the meeting the participants are free to refer to information provided or points and opinions expressed during the meeting, but neither the identity nor the affiliation of the source(s) of what has been said may be revealed. In addition to this condition, it goes without saying that separate meetings devoted to conflict mediation should take place behind closed doors to create a safe environment for the conflicting parties. Finally, successful conflict mediation based on accommodation, compromise, or agreement should be praised by the other participants in the cocreation partnership because it bears witness to the willingness of the conflicting parties to work hard in order not to let emerging conflicts stand in the way of overall goal attainment.

Admittedly, some conflicts are hard to solve and mediation will only result in a temporary cease-fire. Actors that are not involved in the dispute may be tiptoeing around, afraid that the combatants will clash again, and bring the cocreation process to a premature halt. Conflict mediators may try to ease the tensions by segmenting the decision-making process, thus avoiding direct confrontations. If that does not work either, exclusion of the conflicting actors maybe the last option, although it may also seriously damage the cocreation process.

On a final note, however, we should remember that most conflicts are constructive in the sense that they prompt clarification, search for new solutions, and joint learning based on argumentation, revision, and integration. Follett (2011) provides a trivial but illustrative example of constructive conflict: in a library, in one of the smaller rooms, someone wanted the window open, while others wanted it shut. After a short deliberation, they all agreed to open the window in the next room where nobody was sitting.

Conclusion

Platforms create the possibility of convening relevant and affected actors to cocreate sustainability solutions. Convenors should make use of stakeholder analysis to identify those who have a keen interest in solving problem and those who have the power to achieve those solutions. This analysis can help conveners identify overlapping goals that may allow them to build effective alliances and provide insights into how to handle areas of fundamental conflict. Sometimes the number of relevant and affected actors will exceed the capacity to conduct effective discussions and collaborations. In such cases, the solution may be to think of and organize cocreation in terms of more or less intensive spheres of stakeholder engagement. This strategy addresses the limits to inclusion by allowing the participation of a large number of stakeholders while allowing cocreation processes to be more manageable. Ideally, cocreation aims to engage stakeholders on an equal footing for joint problem-solving. To ensure effective participation, actors who lack experience, knowledge, and resources need to be empowered while simultaneously channeling the power of stronger actors into constructive dialogue. To enable empowered actors to invest in sustained processes of creative problem-solving, conveners need to clarify, strengthen, and

create interdependencies between the actors. Only stakeholders who recognize the need to exchange and share knowledge, ideas, and resources will be fully prepared to cocreate sustainability solutions. Even when stakeholders recognize their interdependence, conflicts are bound to arise, leaving conveners with the important task of mitigating conflicts by exploring strategies for accommodation, compromise, and agreement.

Chapter 7

Initiating, Designing, and Diffusing Cocreated Innovation

Abstract

This chapter draws out lessons regarding how the diagnosis of urgent problems, the formation of ambitious and visionary goals, and the participation of stakeholders with critical innovation assets *stimulate* the cocreation of innovative solutions that promote the SDGs (Sustainable Development Goals), and how changemakers can lead and manage cocreated innovation processes. It considers the initiation of innovation processes and the design and testing of innovative solutions as well as the upscaling and diffusion of new successful products, processes and organizational forms. Finally, it identifies several common pitfalls that are important for changemakers to avoid, including an assumption of the necessity for heroic leadership, failure to include relevant actors, overly strict and detailed plans and procedures, and inability to integrate newcomers.

Keywords: Innovation; visionary goals; innovation assets; leadership; diffusion; problem diagnosis

Promoting the SDGs Through Cocreated Innovation

Sometimes the best way to enhance sustainability is to do more of a good thing that works but this is not a viable strategy when existing strategies and standard methods have proven insufficient or ineffective, or when we face unknown, uncertain, or unpredictable challenges such as the COVID-19 pandemic. In this situation, we need to look for new innovative solutions. However, it is far from easy to innovate because it entails looking beyond what is and imagining what could be and how to make it happen (Torfing, 2016). Going beyond present solutions calls for creative destruction of habitual practices, common wisdom, and taken-for-granted beliefs in order to look for alternatives and potentials and

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to openly explore next steps. A next step could be a search for things to eat when traditional foods are no longer sustainable, for ways that farmers can make a living when they face prolonged periods of drought, or for new employment opportunities when the coalmines shut down because fossil fuels are phased out. In such cases, cocreation offers itself as a viable strategy for venturing into the unknown. Bringing together relevant and affected actors can help to explore the implication of social, environmental, and economic change, to consider different ways to tackle problems and challenges, to identify and test pathways toward a better future, and to mobilize the collective courage, resources, and commitment to change existing structures and practices. Cocreation is also an important means to recruit ambassadors and entrepreneurs that can spread successful innovations to other localities and setting so that more people can benefit from them.

Cocreation does not necessarily produce innovative outcomes. Sometimes cocreation merely strengthens coordination, promotes agreement about the value of existing strategies, or fosters much needed adjustment to standing arrangements. While cocreation may succeed in doing these important things, such achievements are insufficient for successfully addressing the SDGs (Sustainable Development Goals). This formidable task calls for realizing the innovative potential of cocreation. Changemakers can do a lot to strengthen the innovative capacity of cocreation through strategic management and leadership that creates opportunities for actors to engage in joint efforts to explore, develop, and implement new solutions to persistent problems, unpredictable challenges, and sudden crises (Ansell & Gash, 2012). This chapter considers how changemakers can support cocreated efforts to find effective new ways of meeting the SDGs. Our focus is on the importance of initiating, designing and facilitating networks and partnerships in a way that stimulates cocreated innovation and promotes the diffusion of successful innovations to relevant audiences.

Initiating Cocreated Innovation

The innovative capacity of cocreation hinges on how the collaboration process is initiated (Eggers & Singh, 2009). Initiation refers to the agenda that brings people together and the skills they bring to the table. As indicated in Fig. 7.1, the innovative capacity of cocreation depends on the content of the problem diagnosis, the boldness of ambitions and visions, and the composition of the participants.

As described below, the strategic effort of changemakers to influence initiation processes can spur their capacity for producing innovative outcomes of great value to the public.

A problem diagnosis that focuses on the failure of existing efforts to address problems such as life style-related illnesses, poverty, unemployment, recurring flooding or water shortage, and that simultaneously stresses that the maintenance of the status quo is no longer an option, will motivate a group of actors to pursue innovation. It will highlight the necessity of finding new and better ways of solving old and new problems and challenges. While recognizing the risks

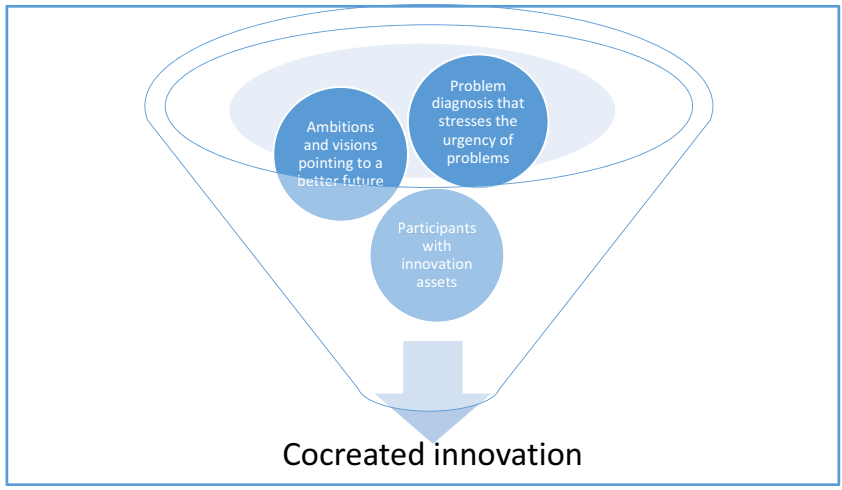

Fig. 7.1. Initiation of Cocreated Innovation.

involved in trying something new, the problem diagnosis visualizes the likely short- and long-term costs of remaining on the current course rather than trying something new.

Changemakers can *push* actors involved in a cocreation to innovate through a strategic framing of the problem diagnosis. This can be done by stressing the disadvantages and dangers of preserving the status quo and by highlighting the failure of existing efforts to do something about them. References to the SDGs and statistics that document this state of affairs in a given locality can help to bring local problems into the open and onto the policy agenda and can legitimize voices that call for change. In advanced industrial societies, many assume that the water is clean, but the SDGs have triggered discussions about the actual state of water quality, concern for the salience of existing strategies and methods for cleaning the water, and recognition of the need to innovate water management systems. This is evidenced by growing concern for the impact of mining on water quality in Europe (Endl, Tost, Hitch, Moser, & Feiel, 2019).

Changemakers can also *pull* actors toward innovation by daring them to venture into the unknown together (Clausen, Demircioglu, & Alsos, 2020). Doing so requires changemakers to infuse hope, vision, and courage into the cocreation process and promote opportunities for members of a network or partnership to think outside of the box. Willingness to innovate hinges on actors' belief in a better future and in visions of what that future might look like. It also depends on having confidence in the prospect of changing society in a desired direction as well as having courage to embark on a journey with an uncertain destination. Fig. 7.2 illustrates the effort of changemakers to push and pull cocreation in the direction of innovation.

Fig. 7.2. Pushing and Pulling Cocreation toward Innovation.

Changemakers can build the innovative capacity of actors involved in cocreation by bolstering their self-esteem and trust in their own knowledge and resources. Changemakers may also spur innovation by spotting emerging trends and possible future pathways that offer windows of opportunity for trying something new. Moreover, they can seek to grant actors in cocreation a license to innovate by securing political, moral, and fiscal support from powerful actors. Hence, changemakers may act as gatekeepers who collect information about what external actors think, want and do, and use this information to build alliances, trust, and relationships that expand the scope for and bolster the legitimacy of innovation. As shown in a recent study of technological development in Taiwan, outward-oriented gatekeeping has a profound impact on a network's ability to develop new and innovative technologies (Hung, 2017).

Linking local ambitions, visions and goals to the SDGs can galvanize local efforts to produce innovate solutions (Bhalerao, Louwerse, Quarmyne, & Ritchie, 2019). The UN's role in championing the SDGs helps to make problems haunting local communities more visible. Moreover, national endorsement of the SDGs signals that it is possible, necessary and timely to break with the status quo and viable to change and innovate. Public and private changemakers may exploit the momentum created by the SDGs to create a collective feeling among local stakeholders that change is inevitable, thus helping to break the standard resistance to change. Through the hosting of conferences that put urgent problems on the table, governments, businesses, and NGOs all over the world have pushed and pulled actors to relate to the SDGs in order to build momentum for stakeholders to join forces and look for new and innovative solutions. For example, in collaboration with relevant Norwegian ministries, the University of Bergen organizes an annual SDG conference that is attended by more than 2,500 participants from different countries. The conference explores what kind of dialogues we need to work collaboratively and across disciplines to develop sustainable modes of inhabiting the world.

In addition to pushing and pulling, changemakers can *round up the right actors* in support of innovation. When the goal is effectiveness, it is important to involve actors with the capacity to act and get things done, i.e., actors must have decision-making power and operational skills and resources. When the goal is to secure legitimacy and ownership of governance solutions that curb resistance, the

task is to invite particularly interested actors, those that serve key functions and those in a position to influence others. However, when the main purpose is to innovate, changemakers must bring to the table a diverse group of actors with different backgrounds, knowledge, ideas, and perspectives who possess innovation assets such as open minds, creativity, and an urge to make a difference (Sørensen & Torfing, 2017). In the initiation phase, the key objective is to convince such actors that there is something to gain by working with others in pursuit of innovation and to help them to muster the patience to do so. For this purpose, it is important to enable all of them to understand the problem at hand in order to collectively design and implement new and bold solutions.

To create an initial momentum in processes of collaborative innovation, changemakers may want to pick low hanging fruit in order to demonstrate what can be achieved by innovative problem-solving. Hence, changemakers may ask the following types of questions: Why do villagers continue to fetch dirty water from the river when there is a new well with clean water a few miles away? Why do homeless people in a big city sleep in the street even when there are shelters with available beds? Why are local businesses and homeowners reluctant to shift to renewable energy sources even when it would be profitable for them to do so? Answering these questions may lead to simple and easy innovations that may stimulate efforts to pick the higher-hanging fruit.

Summing up, changemakers can initiate cocreated innovation through a strategic visualization of the urgent need for innovation, through rounding up actors with relevant innovation assets and through encouraging them to look for new approaches and effective solutions to a given problem. The SDGs can benefit from cocreated innovation but can also serve as rallying points for bring together key actors and building momentum for change. Such an SDG-inspired strategy for mobilizing actors has been pursued by many governments, businesses and NGOs. In the Czech Republic, for example, the government invited private enterprises and civil society organizations to discuss problematic workplace conditions and prospects for promoting Corporate Social Responsibility (CSR). In Denmark, the doctors' association, a patient association and a health care network brought together a diverse group of stakeholders to consider the implications of SDG 3 for formulating and executing a national action health plan. In Pakistan, a series of regional consultations served as a first step in getting local actors to discuss the connection between the SDGs and local problems and the prospects for doing something about both. In Laos, a series of consultations in the provinces invited volunteers and young people into the debate about how to achieve the 2030 Agenda and the related SDGs in order to bring new ideas and perspectives into play. The purpose of these meetings and consultations was to stimulate policy and program innovation.

Generating Ideas for Innovative Solutions

After having brought people together around a pressing governance problem, the next task for changemakers is to assist the participants in innovating, i.e., to

develop new ideas, select the most promising ones and turn them into new innovative policies, programs, products and services. Assisting cocreators in producing innovation involves more than getting them to collaborate. Sometimes collaborations confirm the status quo and produce alliances aiming to keep things as they are or merely making very moderate changes that do little to solve pressing local problems. To go beyond the status quo requires changemakers to *catalyze* innovation, a process that refers to deliberate, strategic attempts to disrupt inert assumptions and to then to stimulate the *participants'* ability to reframe issues and explore emerging pathways (Ansell & Gash, 2012).

Catalyzing innovation through disruption and stimulation confronts participants with new insights and experiences that question existing perceptions and spur open-minded and imaginative dialogue about future options. Presenting data and facts about the everyday challenges experienced by unemployed single mothers and the barriers they face in making a living for themselves and their kids can trigger exploratory discussions about how to get them into jobs that make it possible for them to continue to take care of their family. In the same way, knowledge about the extent of and causes of loneliness among elderly people can inspire the search for strategies and methods regarding how to strengthen their social relationships. Receiving loads of information can be boring and block creative thinking, but sessions with a theater group and quizzes can communicate facts in a way that stimulates exploratory debate (Sørensen & Waldorff, 2014). If there is shortage of data, it can be productive to send one or more participants on a fact-finding mission, which could include interviews with relevant and affected actors.

Having catalyzed collective reflection around a given problem, the next task for changemakers is to stimulate local networks and partnerships to search for new ways to overcome the problem at hand and inspire their efforts to develop viable new strategies, tools, and practices for making things better. One way to do this is to invite guests with inspiring propositions. Another way is to get networks and partnerships to perform focus group interviews with or solicit information from hard-to-reach stakeholders. A third method is to crowdsource proposals from experts as well as from the broader public. Social media makes it easy to ask a large group of actors for their views and ideas on a given topic. Collecting ideas from many sources has proven a valuable means to prompt the cocreation of ideas for new innovative solutions that can enhance sustainability in transport, housing, energy, education, farming, health care, and planning (Brabham, Ribisl, Kirchner, & Bernhardt, 2014; Cai, Ma, & Chen, 2020; Poetz & Schreier, 2012).

Another way to catalyze cocreated idea development is to make participants look beyond the local context to explore what has been done elsewhere (Albury, 2005). Excursions can be very valuable for getting a closer look at the nuances around an innovation in terms of diverse benefits and costs. There is also a lot to learn from looking at best practices developed in other locations regarding how to overcome barriers and challenges to innovation. Moreover, excursions bring the participants on a shared journey with plenty of opportunity to talk informally and at length about what they see and what they think about it. When organizing a visit, it is important to create opportunities for informal exchanges in smaller

groups. If inspirational excursions are not an option, old and new media provide access to insightful knowledge about what others have done, but keep in mind that face-to-face interaction are superior to electronically mediated exchange (Rashman & Hartley, 2002).

It is important to keep in mind that innovating by learning from others is not merely a question of copying and pasting what they do. In fact, it is rarely possible to duplicate things developed in one location or situation and import them to another (Hartley & Rashman, 2018). Local conditions vary and learning from others always involves the translation and adaptation of their ideas when importing them to a new context. Cocreation serves as a melting pot for reshaping and filtering imported ideas from different contexts and sources to fit local purposes and to mix the imported ideas with homegrown solutions. To illustrate, health personnel took inspiration from the fast and efficient pit stops in Formula One racing to innovate the critical interface of patient handover from ICUs to regular hospital units. The adoption and adaptation of new work modes reduced the number of casualties occurring when patients were moved (Catchpole, Sellers, Goldman, McCulloch, & Hignett, 2010).

Finally, looking at other innovations not only triggers new ideas about how to move forward but also helps actors to identify the most promising ideas and discard those that prove to be dysfunctional or come at too high a prize. Introducing open-plan office spaces may sound like a good idea as a means to strengthen the coordination and dialogue between office workers, but visiting and interviewing occupants of such spaces can uncover negative side effects. As such, learning from first movers who have achieved something new and innovative can save a cocreation from making costly mistakes and makes it possible to start the innovation process on an informed and inspired basis. Learning from first movers is particularly important under time pressure or in response to a sudden crisis such as the Corona pandemic. Most national strategies to contain the pandemic reflected hard learned experiences from other countries.

Fig. 7.3 summarizes different types of inputs and formats that can contribute to the development of ideas in cocreation.

Turning New Ideas Into Promising Solutions

Formulating and selecting innovative ideas regarding how to solve local problems and meet the SDGs is just the beginning of an innovation process. The next step is to turn the ideas into something that actually works for the intended purpose, thus resulting in new policies, programs, products, or services.

- *Innovative policies* redefine goals, strategies, and legal mechanisms that shape how money is allocated, what types of programs are supported, and ultimately how social, economic, and environmental issues are regulated. Examples of innovative policies might include: a provincial climate law that sets an ambitious new agenda for CO_2 reduction; a citywide strategy for enhancing public transport, walkability, and cycling; a new county strategy for improving water

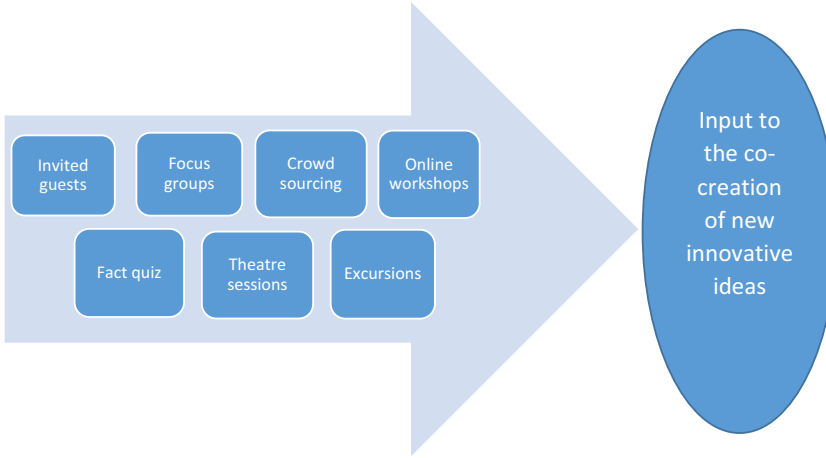

Fig. 7.3. Contributions to Idea Generation in Cocreated Innovation Processes.

sanitation; and a new NGO strategy for making microfinance loans available for female heads-of-family.

- *Innovative programs* create new administrative tools and organizational platforms for delivering benefits to the general public or specific target groups. Examples of innovative programs might include: a water agency's path-breaking program to increase water conservation; a new use of women's self-help groups to distribute information about how to curb sexually-transmitted diseases; a local collaborative program between fishers, biologists, and public authorities to improve fish stock sustainability; and novel agricultural programs for increasing crop resistance to drought.
- *Innovative products* create new material goods or technologies that are produced by the public, private or third sectors and distributed freely or through the market. Examples of innovative products might include: a health-improving device like the *LifeStraw* that purifies dirty water to make it drinkable; a small cooking stove that allows villagers to use scarce wood resources more efficiently; more efficient solar panels that are easier to install and use in remote communities; and a new app that allows citizens to use their telephones to avoid traffic jams, thus reducing CO_2 emissions.
- *Innovative services* create new ways of producing and delivering services in response to local needs. Examples of innovative services might include: the use of pop-up vaccination stations to increase vaccination rates; agricultural extension services that help local farmers conserve topsoil; mobilization of volunteers to provide environmental-friendly transportation for the elderly; and matchmaking of homeless persons to facilitate their collective ability to succeed in rehousing efforts.

It is when a network or partnership has cocreated and selected a new promising innovative idea that the design process starts. Designing innovative policies, programs, products, and services involves giving a promising new idea a tangible and concrete form. Sometimes it is valuable to invite new actors with relevant practical skills and hands-on expertise into the design phase. The design process starts with experimentation. The participants develop different representations or models of the idea, and test first versions through prototyping. A prototype is a preproduction representation of some aspect of a concept or final design (Camburn et al., 2017), and prototyping is an iterative process that aims to improve the functionality of a policy, program, product, or service through iterative experimental testing. Early experimentation often begins in protected laboratory-like environments and later proceeds to testing in real life settings. Prototyping an innovative design facilitates the incorporation of knowledge achieved through the feedback obtained through iterative testing of gradually improved prototypes. If or when an innovation reaches an acceptable degree of functionality, the next step is a cautious effort to upscale and customize it to a format that works in many settings.

Fig. 7.4 illustrates the overall design process that turns promising ideas into workable solutions.

The value of prototyping is likely to enhance if it involves stakeholders with different perspectives and insights needed to evaluate the functionality of an innovation solution and to anticipate the challenges that might arise when the innovation is applied on larger scale and under realistic conditions. A new sustainable material for wrapping postal packages may function well when those who test and develop the prototype have the time, resources, skills, and commitment to use it. It is far from certain that it will work as well under intense time pressure or if the postal employees or customers either do not trust the material or do not know how to use it. The involvement of both the employees and the customers in prototype testing will help to identify such challenges related to bringing the innovation into use in relevant settings. The importance of engaging stakeholders in prototyping is widely documented in research and has become a standard procedure of software developers. Broad involvement in prototyping has also found its way into public and private service delivery (Jefferies, Bishop, & Hibbert, 2019; Paskaleva & Cooper, 2019).

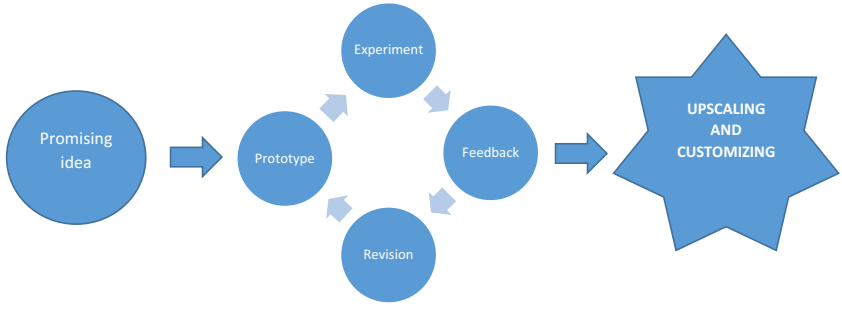

Fig. 7.4. The Design Process.

The value of broad inclusion of stakeholders can continue into the implementation phase. Dialogue up and down the implementation chain can yield important information about the functional qualities of the innovation and facilitate adaptation in the face of emerging challenges. Such a dialogue may also allow cocreating actors to detect whether specific achievements come at an unintended cost, for example, by negatively impacting other SDGs.

Diffusing Successful Innovations Through Cocreation

Innovations that demonstrably work well for achieving one or more SDGs in a particular setting may also contribute to goal attainment in other settings. A new way of promoting intergenerational dialogue in local communities developed in the Global South may have something to offer in the Global North, and innovations in food preservation may be relevant for space science, which in turn may help us understand the dynamics of climate change (Rahman, 2007; Zanello, Fu, Mohnen, & Ventresca, 2016). Innovations do not always spread to all those who could benefit from them, however. One barrier is a certain reluctance to learn from others and a related barrier is that those who innovate may not be inclined to share their innovations with others.

In competitive markets, innovators may be eager to commercialize their innovations and this incentivizes them to discourage others from imitating what they have done. Patent laws serve as a means of protecting innovators against imitation enabled by industrial espionage or reverse engineering. This protective shield may be necessary to secure investment in innovation, but it also acts as a main barrier to the diffusion of innovations.

A key advantage of cocreated innovation based on collaboration in networks and partnerships is that it does not create the same commercial and legal barriers to the diffusion of innovations. The many actors who have been involved in the cocreation process share the ownership of the innovation and will often serve as ambassadors for diffusing it to actors in other contexts who are free to adopt and adapt the innovative solution.

Despite these comparative advantages, those who have taken part in cocreating an innovation do not always spend much time spreading the innovation to others. Changemakers can do a lot to inspire, motivate, and help partners to do so. Strategies for spurring innovation diffusion may include:

- Encouraging partners to pay *attention* to their role as ambassadors for successful innovations, by getting them to mobilize their contact networks and to identify and target relevant audiences;
- Making it *attractive* for partners to invest time and energy in spreading the word by emphasizing the reputational and societal benefits of diffusion and highlighting the prospect of winning recognition and using that recognition to obtain future funding;
- Creating *arenas* such as open seminars, workshops, conferences, digital forums, and websites that make it easy for partners to broadcast information about successful innovations.

These mechanisms for promoting cocreated innovation diffusion are illustrated in Fig. 7.5.

The efforts of changemakers can be supplemented by activities in the wider local, national, and international environment for local SDG projects. Innovation award programs that give a prize to both first- and second movers can stimulate innovation diffusion. Another strategy is to appoint particular projects or localities as "beacons" of successful SDG innovation so that other changemakers can take inspiration from them and possibly emulate their innovative practices. Digital innovation hubs can also be created to display multiple SDG innovations from different localities, sectors, and countries. A case in point is the digital innovation hub *Public Service Innovations Network* in East Java, which has played a key role in spurring further innovation that fosters good local governance (Setiadi, Rapp, & Ferrazzi, 2019).

Avoiding Pitfalls

It is far from easy to lead and manage cocreation of SDG innovation since experience shows that there are several common pitfalls that must be avoided. One such pitfall is when changemakers think that they must themselves come up with all the innovative ideas. Changemakers tend to be highly committed and eager individuals with an urge to move forward, and they might be tempted to speed things up and take over when things are going a bit slow. Taking over may have negative implications for the cocreation process because it can lower the commitment and sense of ownership of the partners and reduce their willingness to invest time and energy in working together (Bason, 2018). A way to move the process forward without stealing the show is for changemakers to accept that they must present their own innovative ideas and solutions on the same terms as the other participants. Employing this strategy will require a significant degree of *patience and calmness* for changemakers who may be bursting with new ideas and enthusiasm to quickly move the agenda forward.

Another potential pitfall is a fully understandable urge to round up the usual suspects instead of inviting unknown people with relevant innovation assets. The temptation to choose the former option is overwhelming because fewer surprises are likely to occur. It may appear safe to bring people together who are used to working with one another and act in predictable ways. They will not offend each

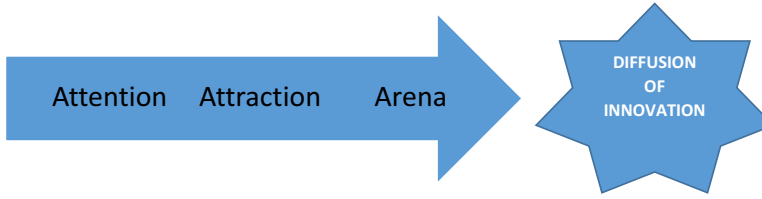

Fig. 7.5. Factors Affecting the Diffusion of Innovations.

other because they know how to behave and what to say to promote collaboration and avoid conflict. This safety may come at a high price if the eagerness to collaborate and blend in and follow well-established patterns of action might hamper the ability to innovate (Skilton & Dooley, 2010). Innovation grows out of an effort to bring people with different worldviews, experiences and ideas together and to let the participants disrupt one another's tacit assumptions to stimulate the emergence of new ideas and approaches. Changemakers may combine a certain degree of safety with the risks associated with convening new players by bringing in facilitators skilled in conflict mediation or using techniques such as appreciative inquiry to manage differences (Cooperrider, Whitney, & Stavros, 2008). Ultimately, appreciation of differences still calls for *courage and acceptance of tensions* by changemakers.

A third pitfall is to develop and commit to an overly strict and detailed plan for the innovation process. Such a plan can easily become a strait jacket that will seriously hamper the cocreation of innovative solutions. In most cases, problem diagnosis, goals and visions, and project activities will change during the innovation process and will call for a revision of plans and timeframes. Leading and managing cocreated innovation involves moving forward and guiding the process without knowing where it ends. A way to diminish this dilemma is to remain flexible and be prepared to allow for adjustment and thus engage in emergent planning (Mintzberg & Waters, 1985). Engaging in emergent planning and flexible action takes plenty of *guts and an adventurous spirit.*

A final pitfall is the temptation to focus efforts on supporting collaboration between the original group of partners while ignoring newcomers who may also have something relevant to offer. Inviting new people to join the cocreation process at later points when new ideas and aspirations have emerged can spur innovation, but inclusion of new actors may also destabilize productive dynamics within the group. These new actors may challenge the earlier agreements and problem diagnosis. One strategy for dealing with this tension is to form sub-groups or hosting events around specific topics that manage the social tensions between old and new members. In any case, bringing on board new partners later in the innovation process requires changemakers to balance *loyalty* to the original partners with wholehearted embrace of the newcomers.

Conclusion

This chapter has insisted that achieving the SDGs requires innovation, which can in turn be stimulated by bringing together actors with different ideas and experiences. In addition to participants with diverse innovation assets, initiation of innovation processes requires a problem diagnosis that pinpoints the insufficiency and failure of present solutions as well as the formation of ambitions and visions for a better future. The next step in the innovation process is to catalyze new and promising ideas using different tools and techniques that provide fresh input into collaborative processes. Once promising ideas have been identified, they must be turned into concrete and feasible solutions. In this process, cocreation partnerships may benefit from formulation and testing of prototypes that iteratively

improve preliminary versions of the new solution. While innovative solutions may do a great job in enhancing the local achievement of SDGs, the impact of innovation may be greatly improved through diffusion of successful innovations to other localities, sectors, and countries.

The analysis presented in this chapter can be summarized in a list of recommendations for local changemakers. The recommendations specify how to create the momentum to embark on a joint innovation journey. They also point to ways to get the participants into an innovative state of mind, and how they can find inspiration to develop new bold ideas regarding how to solve local problems and subsequently to meet the SDGs. Finally, the recommendations stress the need to spend time turning new innovative ideas into things that work for the intended purpose and to recruit ambassadors who assume responsibility for diffusing successful innovations. Table 7.1 provides a list of recommendations.

Table 7.1. List of Recommendations for How to Spur Cocreated Innovation.

- Propose a problem diagnosis that stresses the failure of existing ways of addressing local problems and stimulates the formulation of a vision for a better future
- Bring together a diverse group of actors with different backgrounds, knowledge, ideas and perspectives, and different innovation assets such as an open mind, creativity, and an urge to act upon problems and try something new
- Use a variety of measures to catalyze idea development within the network
- Engage the participants in experimentation and testing of innovative designs, and involve additional stakeholders and experts if this is relevant
- Involve end-users in upscaling and customizing the innovation
- Encourage the network actors to diffuse successful innovations and use existing infrastructures or build new ones
- Use the SDGs as a point of reference for engaging actors in all the different stages of the search for innovative solutions to local problems
- Avoid trying to be the only source of innovative ideas; mobilizing the usual suspects; specifying all activities in advance; and opening up for newcomers later in the innovation process

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Chapter 8

Cocreating SDGs Through Experimentation and Prototyping

Abstract

This chapter goes into more detail about how experimentation can be used as a strategy of innovation and how cocreation can support this strategy. It first draws out lessons from research on sustainability transitions, design thinking, and grassroots innovation for the development of experimentation. Prototyping is found to be a particularly valuable strategy for cocreating experimentation because it allows stakeholders to develop low-cost designs and to quickly improve them based on group feedback. A range of prototyping strategies are available to cocreators, ranging from mock ups to pilot projects. Finally, the chapter examines how to support, scale and diffuse cocreated experiments.

Keywords: Experimentation; prototypes; sustainability transitions; design thinking; grassroots innovation; diffusion

Introducing Sustainability Experimentation

The last chapter made the case for the importance of innovation to advance Agenda 2030. In this chapter, we focus more specifically on the role of experimentation as a strategy of innovation and the way that cocreation can support this strategy. Experimentation, and in particular prototyping, is important at the stage that lies between idea generation and full-scale roll-out of solutions. Once new ideas have been scrutinized, refined, and integrated into new potential solutions based on a clear problem diagnosis and a tentative theory of change, it is time to develop and test one or more prototypes in practice in order to see whether they work as expected and produce the desired outcomes when tried out in small-scale pilots and experiments.

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Many, and perhaps most, sustainability experiments are technical or natural in the sense that they aim to test new technologies or new kinds of crops. However, not all experiments are simply technical or natural, and there are an increasing number experiments with policy, administration, and governance as well. Experiments may also be "socio-technical" in that the experiment concerns how a technology functions in a particular social environment (Ceschin, 2014).

There are many types of experiments and they can be used for different purposes. Perhaps the best-known type of experiment is the randomized controlled trial (RCT), which is generally used to scientifically establish whether an intervention causes a particular outcome. For example, does this policy intervention (e.g., a new program, service, or regulation) demonstrably produce the effect that it purports to produce (e.g., reduction in poverty, improvements in agricultural productivity, or more efficient water use)? RCTs are widely used in the field of development and in many areas of sustainability research (Ansell & Bartenberger, 2016; de Souza Leão & Eyal, 2019).

Another broad class of experiments – which for convenience we will label *generative experiments* (Ansell & Bartenberger, 2016) – is less about establishing causality and more about *developing* workable problem solutions in particular contexts. This class of experiments is known under a variety of specific labels, such as design experiments, socio-technical experiments, and pilot projects. While these experiments may also be concerned about establishing the effect of a particular intervention, they typically sacrifice some "control" over experimental conditions in order to ensure that the experiment works within a specific real world context.

RCTs and generative experiments are not mutually exclusive, and they may work together in various hybrid styles. However, it is useful to know that they tend to draw their inspiration from different disciplines. Whereas RCTs draw much of their inspiration from clinical trials of medicines, generative experiments tend to draw their inspiration from the field of design. In this chapter, we are primarily focused on generative experiments rather than on RCTs.

The concept of prototyping is a design strategy that stresses that solutions to problems can be achieved at lower cost and with lower risk by developing and iteratively refining model solutions. The logic of prototyping incorporates several different principles, and especially the idea that it is useful to put solutions to the test before investing a great deal in full-scale implementation. By starting out with a low-cost or limited prototype, failure is not as costly and opportunities for learning are enhanced. Prototyping is the opposite of a one-shot, full-scale solution – it requires multiple small iterations of improvement that breakdown the barrier between innovative designs and implementation. As a strategy of problem-solving, prototyping is tolerant of "failing cheap, early and often."

Experiments and prototyping may be successfully organized in a relatively top-down technocratic fashion by experts and government. However, research on sustainability has also begun to recognize the value of more bottom-up strategies of "distributed" or "societal" experimentation, which often taps into the local knowledge of social groups (van den Heiligenberg, Heimeriks, Hekkert, & van Oort, 2017). For example, sustainable sanitation innovations promoted in a

top-down fashion have often run into resistance and have not encouraged social learning. By contrast, sustainable sanitation organized or managed by end users has led to cumulative refinement, with the lessons learned by early adopters contributing to improved sanitation systems over time (Lopes, Fam, & Williams, 2012).

Cocreation offers one version of how a more bottom-up, distributed, or societal experimentation may be advanced. Experiments can be "co-designed" through partnerships of government, community, and Universities. For example, in Kampala city, Uganda, representatives of the local parish, the city authority, Makerere University and neighborhood associations worked together to develop charcoal briquettes and bio-gas from household waste (Buyana, 2019). Community-based experimentation is increasingly seen as critical for sustainability and cities, in particular, have been recognized as important in fostering sustainability experimentation (Bulkeley & Castán Broto, 2013; Wolfram, 2015).

Cocreated experiments provide opportunities not just to learn about the effects of an intervention, but also about how to bring together actors to imagine new ways of working and living together (Von Wirth, Fuenfschilling, Frantzeskaki, & Coenen, 2019). Such experiments, for example, can foster the development of collaborative communities that encourage more ambitious efforts at sustainability, as suggested by urban resilience experiments in Dublin (Crowe, Foley, & Collier, 2016). By creating supportive communities around sustainability goals, cocreated experiments also have a potential to reinforce behavioral change in ways that can support sustainability (Ceschin, 2014).

Thus, experiments may facilitate more ambitious efforts at sustainability by supporting innovation, producing knowledge, and building vision and commitment for more sustainable ways of life. They can demonstrate the viability of certain strategies or innovations, and because they tend to be circumscribed in scope, the public may be more accepting of their failure. Cocreated experimentation can mobilize local knowledge and build community support and behavioral change for sustainability innovations.

Further exploration of the intersection between cocreation and sustainability experimentation can draw inspiration from existing research on sustainability transitions, design thinking, and grassroots innovation.

Sustainability Transitions

Experimentation has been a central concept in research on sustainability transitions (Raven et al., 2017) because such transitions depend on demonstrating the viability of more sustainable pathways. In this research tradition, unsustainable technological regimes are conceived of as being self-reinforcing and very difficult to change even if there is social and political support for change. In the language of sustainability transition research, these regimes are "locked in" by technological investments, professional training, political interests, and social conditions. Thus, reforming such regimes to enhance their sustainability is an uphill struggle, if not a mission impossible. The sustainability transitions literature has

emphasized that reform can be facilitated by allowing for experimentation in protected niches at the margins of existing regimes.

Transitions experiments are typically conceived of as "real world" experiments – that is, they take place in actual contexts rather than being confined to artificial laboratory settings (Nevens, Frantzeskaki, Gorissen, & Loorbach, 2013). A key point about these experiments is that they not only aim to learn about the socio-technical innovation in question but also seek to create – or at least to explore – the political and social change necessary to move toward a more sustainable future (Ceschin, 2014).

Sustainability Transition Experiment

In 2011, a sustainability transition experiment was launched in the poor neighborhood of Carnisse in Rotterdam. This neighborhood had been the target of many national and local programs to improve housing, security and education, etc., but the community's problems appeared resistant to change. To overcome the deadlock, the city government adopted an experimental approach and formed the Resilience Lab to promote a range of activities, including urban gardening, educational coaching, and assistance with child rearing. It also sought to mobilize residents to envision a sustainable future for Carnisse. A key condition for success was that the Resilience Lab did not try to transform the neighborhood's governance regime but rather sought to stimulate residents' awareness, skills, and solidarity, thus enabling them to advance minor regime shifts in relation to particular issues and showcase alternative ways of doing things in practice (Frantzeskaki, Van Steenbergen, & Stedman, 2018).

Design Thinking

It has been argued that design thinking offers an approach to address the SDGs, and in particular to integrate different SDGs in an effort to promote sustainability (Maher, Maher, Mann, & McAlpine, 2018). Research finds that technical sustainability experimentation that does not involve users is often missing an opportunity to gain valuable design information (Hoogma, Kemp, Schot, & Truffer, 2002). However, design ideas are not merely *tested* on end users or stakeholders, but codesigned with them (Liedtke, Baedeker, Hasselkuß, Rohn, & Grinewitschus, 2015). For example, the SusHous Project sought to use visioning exercises to work with households in five European countries to imagine new ways that traditional household practices could be reorganized to enhance sustainability (Brown, Vergragt, Green, & Berchicci, 2003). Role-playing experiments and mock ups have been used to codesign buildings with inhabitants with the goal of reducing energy consumption (Guerra-Santin et al., 2017).

Although codesign of prototypes for sustainable products and services is more common than it is for policy (Kimbell & Bailey, 2017), public sector innovation labs have also begun using design thinking (McGann, Blomkamp, & Lewis, 2018). Policies operating on a specific scale can be understood as prototypes for extension of particular policy instruments to other sectors and domains. For example, acid rain policy in the United States was a prototype of an emissions trading policy instrument that has since been widely used (Voß, 2007).

A strategic approach to design thinking will consider the needs and demands that may arise during different different stages of the innovation process. The Cape Town Sustainable Mobility project, for example, used a design approach not only to develop a sustainable mobility system for the disabled and elderly, but also to consider how to implement and scale up the project (Ceschin, 2014). This broader strategic approach provided an impetus for a codesign approach that brought together a range of actors who might be important during implementation. The Cape Town project involved actors along the entire value chain from producers to users, as well those groups who ultimately had a role in authorizing the project.

The Six Phases of Design Thinking

(1) *Observation*: problems, challenges, and behaviors are investigated from the perspective of end users and other stakeholders
(2) *Ideation*: ideas for solving problems are brainstormed and evaluated based on the needs and desires of those who will use the new design
(3) *Rapid prototyping*: the future is made concrete by quickly producing tangible models of promising solutions
(4) *User feedback*: end users and other downstream stakeholders are invited to comment on and evaluate the prototype and validate its usefulness
(5) *Iteration*: based on user feedback, the prototype is redesigned to promote desirable outcomes
(6) *Implementation*: the validated prototype is implemented at full-scale with continued monitoring of user feedback.

Source: See ideo.com

Grassroots Innovation

The grassroots innovation perspective reminds that us that bottom-up experimentation often takes the form of a loosely-structured social movements or grassroots networks and that experimentation arises out of a political critique of established practices (Grabs, Langen, Maschkowski, & Schäpke, 2016; Smith, Hargreaves, Hielscher, Martiskainen, & Seyfang, 2016). Building these networks is often a key element of innovation strategy (Hossain, 2016). Often these networks build on specific local or national traditions, mobilize existing skill sets, and

reflect a range of motivations for participating. Although these networks often start out informally, they often need to be institutionalized to a degree to develop long-term commitment and financial resources.

Experiments from grassroots mobilization may have a range of outcomes, such as fostering political critique, mobilizing communities, and advancing justice, which are not necessarily well accounted for by more conventional ways of thinking of experimentation. For example, the motivation to experiment may arise out of a political critique of established practices and a desire to identify or create more inclusive or socially just practices (Smith et al., 2016). In their conduct, grassroots experiments can illuminate existing barriers to more change and, in so doing, generate useful critical knowledge. Grassroot innovation may be particularly relevant to the SDGs because they help to ensure that innovative solutions will leave no one behind.

Grassroots innovation typically arises from civic rather than government or private sector initiatives. One approach to grassroots innovation has been dubbed "Do-It-Together" because it calls for networks of individuals who seek to innovate without central direction. Research suggests that this mode of innovation, however, can be facilitated by providing space and social and financial support for experimentation (Jaeger-Erben, Rückert-John, & Schäfer, 2015). Cocreation is an opportunity for bringing together grassroots innovation with government support for sustainability transitions.

Grassroots Innovation

UNLEASH is a global SDG cocreation network that has grown organically since its inception in 2017. By using the innovative mindset of young people and partner talents with leading companies, research institutions, foundations, non-profits, and investors, UNLEASH has organized innovation events covering more than 4,000 young people from more than 100 countries in Denmark (2017), Singapore (2018), Shenzhen (2019) and a series of digital hacks in 2020 and 2021. The 2022 UNLEASH Global Innovation Lab is held in the state of Karnataka, India.

UNLEASH sources global youth talent to engage in structured innovation events with the yearly Global Innovation Lab running over 5 days. Using the SDG Framework, local and global insights ignite new discussions and unlock new perspectives on the SDGs, followed by a problem framing and rapid ideation phase. Typically after 48 hours, the participants develop potential solutions facilitated by business model innovation and cocreation, pitching them to one or more panels of judges.

Through this structured selection process, the best solutions receive support for implementation by connecting the UNLEASH talent to capital, corporate partners, technology, and local support networks.

What began as stand-alone global events have now grown into sophisticated eco-systems of intertwined UNLEASH communities. The core is the UNLEASH alumni network, supported by UNLEASH Plus, which is a global incubation program for solutions aiming to have a positive SDG impact and UNLEASH Circle, which is the gateway to funding for promising social enterprises. As a new community initiative, UNLEASH is establishing an Ambassador Programme with a view to bringing community changemakers into a 12 month capacity development and network program. The intended outcome is to increase community leadership for SDG action and advocacy.

The key to success has been UNLEASH's ability to maintain diversity and use UNLEASH fellowships to secure equal access of youth participants to events. Furthermore, formal application processes open to everyone have secured high standards and fairness across activities and given the UNLEASH community a sense of being part of something meaningful.

A key lesson for UNLEASH is that "intrapreneurs" who move ideas forward within existing organizations or companies are just as important as entrepreneurs who create new businesses. However, experience shows that both approaches benefit significantly from an understanding of the cocreation process and the value of perseverance.

Experimentation as a Change Strategy

Community-based innovation and experimentation is critical for advancing sustainability. However, innovation and experimentation can be socially, politically, environmentally, and economically risky. Some research suggests that starting by envisioning comprehensive radical change is problematic because it tends to set the bar too high and that more incremental progress is more realistic, though these small changes do not necessary congeal to produce a major shift. Both radical and incremental change strategies may be hampered by the current regime (the institutions, people and practices associated with the dominant technology), which will often block or hinder progress toward sustainability. Therefore, in any serious change effort, there are likely to be conflicts between those who seek change and those who would preserve the current regime (Wittmayer, van Steenbergen, Rok, & Roorda, 2016).

One way to thread the needle between radical and incremental change is to build on existing efforts at experimentation in ways that magnify or multiply their effects. A Finnish project on residential energy use targeted working with individuals and communities that had already taken some initiative toward experimenting with household energy use and piggybacked on a five-city bottom-up initiative to reduce carbon emissions (Jalas et al., 2017). This project also fostered various mechanisms of peer support for innovation and sought to enhance the collective agency of many different households. These efforts helped to magnify the impact of this project.

A valuable strategy for managing the tensions inherent in sustainability efforts is prototyping. A prototype is typically a low cost, provisional effort to evaluate how well a proposed idea or solution will work in practice. The testing of prototypes for new and promising SDG solutions often requires iterative rounds of trial, assessment and adjustment before the performance and impact of the new solution is satisfactory and it is ready to be up-scaled. Successful testing of prototypes helps to bridge the gulf between decision-making and implementation. Big sustainability initiatives can be disaggregated into smaller design experiments that help manage the risk associated with implementation of large or bold policy or program changes.

Prototyping helps to make issues concrete and to surface issues that might otherwise not be voiced or even recognized, thus allowing perspectives and assumptions to be tested (Sanders & Stappers, 2014). "Quick and dirty" or "low fidelity" prototypes may provide enough information to identify issues and opportunities that can be reformed, which can then be refined by providing more specificity and working out problems and tradeoffs. For example, a project that ultimately culminated in the development of a MotionMap to provide information on multimodal urban travel began as noninteractive maps with colors indicating the busyness of certain urban areas. These maps were then converted into simple interactive maps and their functionality was tested. Eventually, the refined prototype came to focus on facilitating multi-modal travel (Valdez, Cook, Langendahl, Roby, & Potter, 2018).

As summarized in Table 8.1 below, prototyping may take several different forms in developing SDG solutions. At one end of the prototyping spectrum, prototypes may simply take the form of brainstorming exercises where participants seek to concretize their ideas in the form of workable agendas. In this case, prototyping may utilize pen-and-paper visualizations, scenarios or thought experiments, with continuous input from participants representing different interests and perspectives. Physical or computerized simulation models or mockups of proposed solutions are a somewhat more ambitious form of prototyping, allowing the representation of the full-scale solution at lower cost. A still more ambitious strategy includes pilot projects, which may produce a trial solution in a single village or region or may produce a limited or scaled-down, but still operational, version of the full-scale solution. Finally, prototyping may entail conducting design experiments with a full-scale solution in order to see how they can best be rolled out or implemented.

Thus, prototyping varies in terms of how closely the prototypes approximate full-scale roll-outs and, as a result, they entail tradeoffs for cocreators. Pen-and-paper versions of prototyping are inexpensive and rapidly conducted and allow many iterations and rapid learning, but they are also less realistic than full-scale versions. Local cocreation processes may consider employing multiple strategies, beginning with low cost, rapid iteration prototyping, and gradually working up to more costly but more realistic prototypes. Virtual or visual prototyping can help participants to identify sustainable strategies (Papahristou & Bilalis, 2017).

Scenarios are "coherent, internally consistent, and plausible descriptions of potential future trajectories of a system" (Pereira, Sitas, Ravera, Jimenez-Aceituno,

Table 8.1. Modes of Prototyping.

Modes of Prototyping	**Description**
Scenario planning	Scenario planning may use traditional strategic planning and forecasting techniques, but may also draw on more arts-based narrative and performance strategies
Paper prototyping	Using pen and paper to create low-cost, low-fidelity prototypes
Virtualization	Computer-aided design allows the creation of virtual prototypes useful for developing sustainability
Serious games	Serious games have instrumental purposes but enlist playful exploration, learning, and experimentation in a safe space. Both the codesign of the game and the playing of the game can be understood to be a type of prototying
Mock-ups	Mock-ups provide an approximate visual and physical representation of a design solution
Simulation models	Simulation models use various dynamic modeling techniques and can be used to facilitate rapid prototyping
Pilot projects	Pilot projects are attempts to learn about an idea or innovation by deploying it to a limited extent or in a favorable field setting

& Merrie, 2019, p. 2). Arts-based scenario development utilizing performance (e.g., dance or theater) or story-telling may help to mobilize imagination and draw out emotions in cocreating future scenarios, eliciting collective creative responses that allay power differences among stakeholders and free their imagination to better address uncertainty (Pereira et al., 2019). Scenarios and serious games are particularly good for representing anticipatory future-oriented knowledge and for capturing the systemic nature of sustainability challenges (Gugerell & Zuidema, 2017; Iwaniec et al., 2020). Such strategies offer many possibilities for exploring alternative sustainability strategies. A serious game, for example, was used to help citizens of Kyoto, Japan to imagine a more sustainable local food system and to develop relevant policy to bring it about (Schröder et al., 2019).

Full mock-ups or pilot projects are even more fully developed prototypes that may provide high quality information, demonstrate proof-of-concept, aid in the investigation of the real-world viability of a policy, program, product, or service, and provide a basis for further advocacy (Vreugdenhil, Slinger, Thissen, & Rault, 2010). In the Danish city of Copenhagen, for example, a prototype waste recycling collection point that would also enhance the livability of the city was introduced for a three-month period at a particular urban square (Munthe-Kaas & Hoffmann, 2017). The prototype demonstrated the possibility of combining

recycling and recreation, but also gave the community an opportunity to engage with the prototype. The result was greater political and economic support for a longer-term implementation.

Prototyping is a way to "fail early" but "succeed sooner" (Hillgren, Seravalli, & Emilson, 2011). One strategy of rapid prototyping has been called the "best bet prototype" (Bossink, 2020). It begins with a research team crafting a new sustainable technology prototype, which is then combined with proven technology. This prototype is then trialed with stakeholders and users, who help identify its potential (Bossink, 2020).

Cocreating Experiments and Prototypes

Studies of sustainability transitions find that focusing too narrowly on technical experimentation alone can ultimately hinder change. For example, a large scale experiment with the use of battery-powered electrical vehicles on the German Island of Rügen created limited networks and limited learning that went beyond technical knowledge (Hoogma et al., 2002). By contrast, an experiment with lightweight electric vehicles in the Swiss town of Mendrisio adopted a wider sociotechnical approach that created broader social support for the innovation. Ultimately, the Swiss approach proved to be more successful in fostering significant change.

Engaging wider communities in experimentation is often a way of gaining valuable information and building support. Design theory emphasizes the importance of understanding design from the perspective of the users who will ultimately experience it. Empathy with the perspective of the user enhances early learning about the downstream effects and consequences of design. From a design perspective, this learning should be brought upstream and incorporated directly into the design process itself. Prototyping can then enhance this social input. Through multiple design iterations, prototyping exploits rapid, direct, and continuous user feedback into design improvements. From a perspective of cocreating the SDGs, users include all the relevant and affected actors who must live with the outcome of problem-solving strategies.

Prototyping can be conceived of as a process of cocreation that engages stakeholders in iteratively refining ideas, innovations, and solutions. A wonderful example is the Lorena cook stove, which was designed to provide cooking and heating with less firewood, preserving forests and reducing a family's time and income spent collecting firewood. Prototypes of the cook stove were co-designed with rural Guatemalans and the innovation was then diffused throughout Guatemala by teams who would travel to a rural village and construct a prototype stove that others could then imitate. As the prototype stove design diffused, its design continued to be refined. The ultimate design of the stove consumed 50% less wood than the traditional cooking method (Murphy, McBean, & Farahbakhsh, 2009).

Prototypes have the value of providing stakeholders with a concrete reference that helps them visualize the final outcomes (Akterujjaman, Mulder, & Kievit,

2020). They can become objects of conversation, bringing people together in discussions around the prototype (Ceschin, 2014). One innovative Swiss project on soil protection filmed farmers sharing their local knowledge about soil conservation. The films became a focal point for a network of farmers concerned about soil conservation and built a sense of ownership over the program (Schneider, Fry, Ledermann, & Rist, 2009).

As focal points of cocreation processes, prototypes can facilitate the alignment of communication and interests (Crona & Parker, 2012). They are also political in the sense that they can be used to build support for particular ideas, solutions or strategies and they can become a form of social glue that holds communities together (Henderson, 1995, p. 294). Participatory approaches to prototyping can also profit from codesigned evaluation strategies and indicators, a practice already developed in the field of sustainable agriculture (Le Bellec, Rajaud, Ozier-Lafontaine, Bockstaller, & Malezieux, 2012). A value of this participatory approach – which should go beyond just end users – is that it builds support for and ownership of the prototype. Fig. 8.1 summarizes the value of cocreated prototyping.

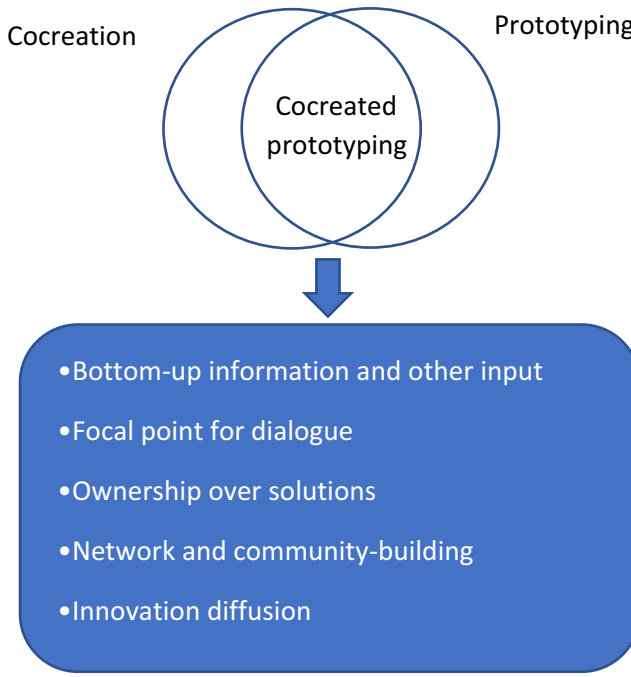

Fig. 8.1. The Value of Cocreated Prototypes.

Supporting Successful Cocreated Experimentation

The degree and quality of user participation can often make or break cocreated experimentation (van den Heiligenberg et al., 2017) and stakeholders may have a range of motives for participating in innovation and experimentation (Ornetzeder & Rohracher, 2013). One lesson of prior efforts is that participation is not necessarily itself an incentive. In other words, stakeholders rarely participate simply because there is an opportunity to cocreate or to experiment. Goals that are ambitious enough to motivate stakeholders to want to participate have been found to be important in successful grassroots innovation (Antikainen, Alhola, & Jääskeläinen, 2017). Like any other form of collective action, cocreated experimentation must be attentive to the types of motivation that participants have to participate (Leino & Puumala, 2020).

Cocreated experimentation must also be sensitive to the distribution of costs and benefits that might hamper the implementation of experiments (Ananda, McFarlane, & Loh, 2020). Careful selection of participants can help to dampen negative power dynamics and avoid excluding marginalized groups (Luederitz et al., 2017). Codesign works best when the design process is facilitated and scaffolded, when learning is facilitated and when cocreators have adequate time to conduct their experiments (Antikainen et al., 2017; Moallemi et al., 2020; Waardenburg, Groenleer, & De Jong, 2020).

Scaling up implementation of the SDGs has been seen as a key challenge (Nhamo & Mjimba, 2020) but a common criticism of sustainability experiments is that many good and successful innovations remain local, one-off experiments that fail to scale or diffuse beyond a single limited and often temporary effort. The informality of local experiments may limit their scaling or diffusion (Johannessen et al., 2019). Evaluation of Global Environmental Facility (GEF) projects indicates that only about a quarter to a third of projects are scaled or diffused beyond their initial context (Uitto & Naidoo, 2019).

This outcome may be entirely appropriate in situations where the goal is to achieve ad hoc solutions to context-specific problems. However, most sustainability problems extend well beyond a single context and successful experiments often provide leverage for more ambitious sustainability efforts (Uitto & Naidoo, 2019). Local experiments also embody cumulative learning that might be relevant for other localities, governing levels, or groups. In such cases, successful local sustainability experiments might themselves be considered prototypes to be subsequently scaled up or diffused. Scaling and diffusion of experiments, however, comes at a risk, because the implicit or explicit contextual conditions that made a sustainability experiment successful in one place or time may not hold in other contexts. Scaling and diffusion processes can thus be understood to be prototyping processes that must pay careful attention to the underlying conditions that produce success or failure.

Pilot projects may not diffuse because the lessons drawn from them are highly localized or contextual and not easily transferable to other sites (Vreugdenhil

et al., 2010). One important lesson of previous pilot projects is that a diffusion strategy needs to be built into the design of the pilot (van Winden & van den Buuse, 2017). In many cases, pilot projects may prove successful but lack support for follow up or implementation, leading to disenchantment if their promise is unfulfilled (Ameha, Larsen, & Lemenih, 2014; Massarella, Sallu, Ensor, & Marchant, 2018). When designing pilots, the WHO advises changemakers to "Begin with the End in Mind" and provides a useful checklist for assessing scalability (World Health Organization, 2011).

A key challenge in scaling up or out is that financial, political, technical, and institutional conditions are different at larger scales than they are at the more limited scale of pilots. An analysis of policy pilot projects found that supportive policies and political support are critical for successful scaling, particularly in combination with effective pilot planning and monitoring and evaluation (Nair & Howlett, 2015). Funding – and particularly public funding – is important for scaling and diffusion of successful experiments (Antikainen et al., 2017), while shifting political priorities can constrain scaling (Uitto & Naidoo, 2019). Pilots that trigger strong social learning are also more likely to diffuse and organizations that operate on multiple scales may help with diffusion and scaling (Hughes, Yordi, & Besco, 2020; Vreugdenhil, Taljaard, & Slinger, 2012).

Pilot projects developed in relatively distant or isolated spaces may be difficult to reintegrate into existing institutions and governing structures (van Popering-Verkerk & van Buuren, 2017). For example, *+cityxchange* is a smart city project in Trondheim Norway funded by EU Horizon 2020. It was designed to cocreate energy efficient neighborhoods by drawing on local demonstration projects. The project was organized outside the city's formal administrative structure, which created problems of conflicting time horizons and for integrating multiple sectors into the project (Gohari, Baer, Nielsen, Gilcher, & Situmorang, 2020). Mainstreaming of innovations typically depends on establishing robust solutions that have broad-based support that forge strong linkages with the mainstream institutions (Smith & Raven, 2012). Successful sustainability experiments build on broad and deep networks that encourage learning (van den Heiligenberg et al., 2017). Such networks support scaling and diffusion when they extend beyond the local context and can translate local knowledge into more generic knowledge while negotiating the terms of scaling and diffusing experimental results (Kivimaa, Hildén, Huitema, Jordan, & Newig, 2017; Smith & Raven, 2012). An example is provided by innovative water governance experiments in Ecuador. These experiments began locally, but were successfully diffused to the national scale by activating extra-local networks of grassroots activists and farmers (Kauffman, 2016). Capacity-building for such networks can aid the scaling and diffusion process.

Diffusion of grassroots innovations can occur through networks of committed activists, through wider networks that go beyond core groups of activists, and through support by higher level institutions and governments (Pesch, Spekkink, & Quist, 2019). Grassroots innovations that start in one

community may themselves develop into platforms that support the diffusion of innovation to other communities, and even nationally and internationally (Antikainen et al., 2017). A range of different types of network mobilization are possible. For example, a study of Finnish energy experimentation found that successful implementation was facilitated by user-run internet forums. These forums created online peer support groups for the distributed implementation, which created the possibility for scaling up the innovations (Jalas et al., 2017).

Some local communities may not have the capacity to experiment or to adopt and implement the lessons of experimentation conducted elsewhere (Johannessen et al., 2019). Agricultural innovation platforms serve to support the scaling of innovations (Totin, van Mierlo, & Klerkx, 2020). Research on successful local Finnish CO_2 emission reduction experiments found that their successful scaling depended on strong intermediary institutions that help to remove barriers to scaling (Matschoss & Heiskanen, 2017).

Aggregating lessons from across multiple local experiments is also important and is not necessarily the same as learning from a single experiment. Platforms and intermediary actors can become relevant mechanisms for helping to collect and share these lessons (Heiskanen et al., 2017). Sharing lessons can also inspire the diffusion of sustainability experiments, though it is also important to learn what has not worked. It is also important to recognize that the success or failure of sustainability experimentation is not the only important outcome, since even failed efforts may have helped to build skills, capabilities, knowledge, social capital, and imagination that can advance sustainability (Heskanen et al., 2017).

See Table 8.2 for a summary of recommendations for how to support, scale, and diffuse successful cocreated experiments.

Table 8.2. How to Support, Scale and Diffuse Cocreated Experiments.

(1) Find ways of motivating each of the participants to engage in cocreated experimentation
(2) Provide institutional scaffolding for cocreated experimentation to facilitate learning
(3) Create formal institutional support in order to scale cocreated experiments
(4) Treat successful local experiments as prototypes when scaling and diffusing them
(5) Build diffusion strategies into pilot projects
(6) Forge links between experimental environments and mainstream institutions
(7) Create platforms and network with external actors to diffuse successful innovations

Conclusion

This chapter examines the potential for experimentation and prototyping to play an important role in advancing a sustainability agenda. Although randomized controlled trials are perhaps the best known type of experiments, we draw inspiration in this chapter from the tradition of design experimentation and pilot projects. This tradition focuses on experiments as a strategy of generating and trialing solutions to specific problems. A particularly valuable concept at the heart of this design-oriented perspective is prototyping, which refers to a strategy of iteratively refining a particular design based on feedback from both designers, users, and stakeholders. As a relatively low cost approach to innovation, prototyping has great potential as an approach to developing, testing, and implementing new approaches to sustainability.

As summarized in Table 8.1, there are many types of prototyping, generally ranging from quick-and-dirty or low fidelity strategies to full-scale rollouts in limited circumstances (e.g., pilot projects). In many cases, these prototyping strategies align well with and support cocreation. Indeed, the design philosophy behind prototyping encourages iterative input from distributed users – input that can be marshalled through cocreation. On the one hand, research suggests that it is important to pay close attention to the motivation of participating citizens and stakeholders in the design of cocreated experimentation – lest the commitment to experiment falter over time. On the other hand, prototyping is itself a powerful mechanism for engaging citizens and stakeholders around a common enterprise, with the prototype becoming a point of interest, communication, and purpose.

As a strategy for generating sustainability transitions, a key challenge for cocreated experimentation and prototyping is that successful experiments often remain local, one-off efforts with limited diffusion or scale. One key piece of advice is that experiments can be designed in part with a consideration for how they might diffuse or scale *if* they are successful. While acknowledging that this kind of foresight can be difficult – especially for small communities – changemakers may especially want to anticipate the continuity of funding support for successful experiments and prototypes. They should also appreciate the importance of extra-local support networks in successful diffusion and scaling.

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Chapter 9

Funding and Financing Local Cocreation Projects

Abstract

This chapter insists that local cocreation projects need not only good intentions and the hard work of volunteers but also require funding and financing of the design and implementation of new solutions. It draws a conceptual distinction between funding and financing and explains who may help to provide funding and financing and why they may do so. As a part of this discussion, attention is drawn to the importance of writing good and persuasive funding applications and drawing up a strong and convincing business case to secure financing of new solutions. The new and emerging strategy for mobilizing private capital to help finance SDG projects is explained and illustrated, before closing the chapter with a discussion of the need to develop a proper system for fiscal accounting and auditing, which can prevent mismanagement and misconduct that eventually undermine popular support for local SDG projects.

Keywords: Funding; financing; funding applications; business plans; auditing; blended finance

The Need for Funding and Financing of Local Cocreation Projects

It is easy to fall into the trap of believing that cocreation of one or more SDGs will bring together self-sacrificing people who will work for free, need no assistance, pay most of the costs of doing their good deeds themselves, and invent attractive and beneficial solutions that almost finance themselves. The reality is quite different. Both funding and financing of local cocreation projects are generally needed, despite the good-hearted aspirations of the participants and the many beneficiaries. Indeed, more funding and improved financing is a key to achieving global sustainability goals (Friedman & Gostin, 2016).

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Engaging public and private actors in the initiation of a local project and organizing the first couple of meetings is relatively inexpensive in monetary terms, but requires a good deal of time, energy and commitment on the part of changemakers and convener organizations that are launching the project. Some projects sell themselves and easily attract scores of resourceful participants, while others require going from door to door trying to commit hard-to-get actors to participate in collaborative problem-solving and share their knowledge and resources with other actors. The gradual building of an alliance of willing and capable actors takes time and requires patience, communication skills and charisma. Changemakers will have to put in many hours and suffer several setbacks when doors remain closed or are shut in their face, but the actual pecuniary costs at this initial stage are minimal. Most often a suitable venue for meetings can be found free of charge and the small costs of spreading the word, sending invitational letters, printing posters, and using social media to advertise events are easily covered by the participating organizations and individuals. People may bring their own food and drink and pay for their own transport to keep costs down.

Consolidating a local cocreation project and taking it forward into problem framing and solution design increases the costs. Understanding the problem at hand and searching for possible solutions may require further empirical investigations based on collection and analysis of data, coordinated efforts to share knowledge between the participants, field trips, and excursions to other localities where new relevant initiatives have been implemented, canvassing the internet to find inspiration to new and promising solutions, etc. The costs of all of these activities add up, although some of the participating organizations may be able to take care of some of the tasks as a part of their standard operations, thus reducing the need for external funding.

Developing and testing prototypes is even more expensive and the risk of failure is high. Sometimes resourceful organizations, e.g., a local government or a private power plant that stand to benefit the most from a new and promising solution, will be willing and able to shoulder the burden, but external fundraising will often be necessary because the cocreation of new solutions supplements the ongoing operations and existing practices.

Finally, it goes without saying that the implementation, adaptation, and evaluation of cocreated solutions require stable financing. Although the new cocreated solutions may replace old ones, new and better services or regulatory schemes can be pretty expensive and the construction and operation of new physical infrastructures are even more costly.

The bottom line is that local cocreation projects are just as costly as other similar public or private projects. The good thing, however, is that parts of the pecuniary and non-pecuniary costs will be covered through the mobilization of the resources of the participants. Still, there is a persistent need for funding and financing of cocreation of the SDGs.

Since we have already referred to "funding" and "financing" several times without properly defining the terms, let's briefly establish the conceptual difference between these two terms, which are often used interchangeably. In the

present context, we define *funding* as an amount of money provided by government, donor institutions, corporate firms, community organizations, philanthropists, or crowds for a specific developmental purpose and based on an agreement that describes the form and content of a particular project, the planned outputs and outcomes, and the timeline for deliveries. Usually, funding is provided free of charge. There may be certain contractual requirements for receiving the funding in the agreement, but there are no requirements to pay back the money that can be considered as a grant or donation.

Financing, on the other hand, is an amount of capital provided by public authorities or financial institutions such as banks and investors to pay for long-term investment in and operation of new solutions, including the production and delivery of services, regulation of social and economic activities, and the construction and operation of a particular infrastructure. If the money comes from financial institutions, they must be paid back with interest. Both public authorities and financial institutions may use formal contracts when financing new solutions implemented by public agencies or private for-profit or non-profit organizations.

Financing of new innovative solutions at the end of a cocreation process is what makes the implementation of new sustainable solutions possible. The money may be provided by governments, banks or investors, but in the final instance it is tax payers, customers or users who are *paying for* the financing of new solutions. Direct and indirect taxes paid to local, regional or national governments finance the lion's share of new cocreated solutions delivered by public agencies, although donations, sales tariffs, and user fees may cut the costs. Cocreation may sometimes lead to cost savings in the public sector because it spurs innovation and facilitates mobilization of private sector resources. However, cocreation often leads to the invention of new add-on solutions that governments are expected to finance over the long term. Such add-on solutions will tend to drive up public expenditure.

If the financing of cocreated solutions delivered by public private partnerships, private companies, or public enterprises is provided by private banks and investors, the money is going to be paid back by users and customers, or perhaps by governments who are leasing private infrastructures or purchase services. If financial capital is paid back by government, it tends to be more expensive for tax payers than if government had provided the financing because the private financial institutions must be paid an interest that tends to be higher that the central bank's interest rates.

Table 9.1 summarizes the important difference between funding and financing.

As hinted above, funding is taking place at the front-end of the cocreation process whereas financing is needed at the back-end. However, there is no clear separation in time between funding and financing, which often overlap, especially since the testing of prototypes and the gradual upscaling of successful small-scale solutions shades into the implementation and consolidation of new solutions. Hence, as indicated in Fig. 9.1, there is often a gradual trade-off over time between funding and financing of cocreation projects for sustainable development.

Table 9.1. The Conceptual Distinction Between Funding and Financing.

	Funding	**Financing**
Coverage	Specific developmental purpose	Investment in initial startup and operation of new solution
Endurance	Short-term (a couple of years)	Long-term (into foreseeable future)
Main sources	Government, donor institutions, corporate firms, community organizations, philanthropists, or crowds	Government, banks, or private investors
Regulatory status	Agreement	Contract
Pay back	No expectation that money is paid back	Money provided by financial institutions or investors is paid back with interest

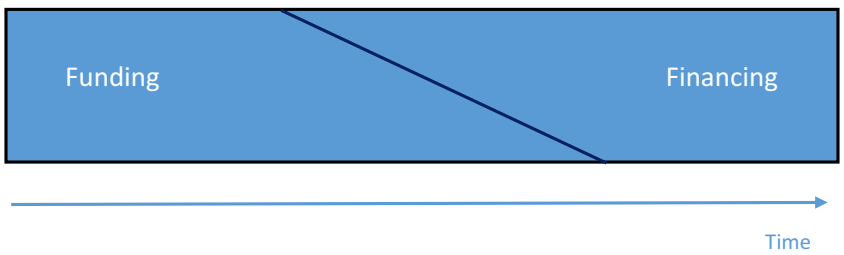

Fig. 9.1. The Combination of Funding and Financing Over Time.

The trade-off between the needs for funding and financing is important because it prompts changemakers and other actors engaged in leading and managing local cocreation projects to spend time on both making funding applications *and* securing future financing. We shall look more closely at these two important tasks in the next couple of sections.

Funding of the Initiation and Development of Local Cocreation Projects

When relevant and affected actors are gathered around the table and begin to explore the problem or challenge at hand, define overall goals, and search for possible solutions, the need for funding becomes apparent. The availability of

funding might actually be brought up in the earlier recruitment phase since potential participants might want to know if there are going to be adequate funds to cover project expenses. Funding may come from a sponsor who is willing to support the agenda, goals, ideas, and actors driving a cocreation process. This sponsor may be completely external to the project (i.e., an international donor organization), a project partner (i.e., a government agency), or a participant (i.e., a private corporation or community organization). The sponsor may provide advice and encouragement, but the main function of the sponsor is to provide a significant part of the necessary funding, if not all of it. Ideally, funders should be agnostic about what the ultimate outputs of the cocreation process, in the sense of making the funding conditional upon producing an output with specific form and content. Such limiting demands could stifle the innovation process, which needs to exploratory and open-ended.

As indicated in Table 9.1 above, there are many potential sponsors that may fund local projects. Let's look at each of them in turn and reflect on their reasons for providing early-stage funding for the cocreation of one or more SDGs.

Government: Governments at different levels may have several funding programs that changemakers, local conveners, or collaborative networks and partnerships can apply to for money for specific projects. The funding provided by government may either be seed money to get a collaborative project going or funding of the development of new solutions to a problem through cocreation. If there are no available funding programs or the cocreation project does not match the overall purpose of the various programs, it is a good idea to contact government officials to hear whether some special funding could be made available. Government will normally be interested in funding local cocreation projects because they need to involve local actors in order to mobilize societal resources, expand their reach into areas they want to impact, harvest new ideas and stimulate innovation, and build support for the SDGs that most governments have come to realize are impossible to achieve alone through government action.

International donor organizations: Whether operated by foreign governments or large international organizations, the fundamental purpose of international donor organizations is to channel relatively large amounts of funding to local development projects aiming to achieve one or more SDGs. They often have programs and people seeking to identify local partners or social entrepreneurs interested in initiating and driving projects based on broad-based inclusion of local community actors. Donor organizations from various countries may have different agendas and priorities, but they are highly committed to the SDGs and they need to build local partnerships because they have sparse knowledge about local conditions and limited staff to run local projects themselves. Usually governments, business, civil society organizations, individuals, and young innovation leaders can apply for funding from international donor organizations that are advertising their funding schemes on the internet.

Philanthropists: Funding may also come from philanthropists or philanthropic foundations who use their private funds to prevent or solve social problems. Funding from philanthropists is often reserved for local

community-based organizations that focus on specific causes such as reducing poverty, providing health care for the poorest part of the population, mitigating infant mortality, enabling young girls to get an education, or curbing sexually transmitted diseases. Philanthropists may give small or large donations to charitable causes to honor family traditions, for religious reasons, out of ethical concerns to do what feels right, or because they want to give back to the country or community they come from and which helped them earn their fortune. Some philanthropists are motivated to give because they want to build a good reputation for themselves or their business and in some countries philanthropy is incentivized by tax deductions.

Public Donation: Large benefactor-driven, collection-financed or member-based community organizations may fund local projects in their area and thus help to build schools, run health clinics or enhance awareness about gender issues, nature conservation, or sustainability. They are driven by idealism and altruism and since they know and have experienced the limits of national awareness campaigns, they are often keen to support goal- and solution-driven collaboration at the local level through donations.

Corporate business sector: Private businesses may offer funding to community organizations or cocreation projects. They may even offer to become a sponsoring partner in collaborative projects aiming to improve the conditions for their employees, the local community or the environment. A growing number of large business firms have dedicated Corporate Social Responsibility (CSR) programs that enable them to supplement corporate for-profit goals with more ethical concerns for improving social conditions and promoting sustainable development. CSR is ultimately about running business firms in socially and environmentally responsible ways, but private firms with CSR programs may also support local projects and partnerships with money or in-kind resources or by means of participating in collaborative projects aiming to advance social, economic, and environmental sustainability. The good things that arise from donations and partnerships may reflect positively back on the firm.

Crowdfunding: Local cocreation projects may also provide funding by raising small amounts of money from a large number of people, typically via the Internet. Crowdfunding is a form of crowdsourcing and alternative finance that relies on donations from people who like the idea or purpose of a cocreation project and think it is worth supporting. There are numerous crowdfunding sites on the internet such as Kickstarter, Indiegogo, Razoo and Crowdrise, which may support local SDG projects.

This list of possible sponsors begs the question of who to approach to obtain funding for local cocreation projects. On the one hand, it is tempting to contact them all at the same time and see who comes back with a positive response. On the other hand, some sponsors, especially the private ones, may want to be exclusive, or at least the main, sponsor in order to brand themselves. For that reason, it might be a good idea to contact sponsors one by one, explore their willingness to fund the project and discuss further funding opportunities with

them. Some funders such as governments and international donor organizations may be interested in having community organizations or corporate sector actors as cofunders because it lends legitimacy and solidity to the project. Hence, depending on the goal or purpose of a cocreation project, the conveners of co-creation may reflect on how to combine different sponsors in a funding package.

Although funders donate money that does not need to be paid back, they still might try to influence the form and content of the projects they are supporting. On the one hand, having several sponsors may result in conflicting demands to the project that can be hard to accommodate. On the other hand, if there is only one sponsor, the ability of the sponsor to influence the agenda and course of a project is bigger than if there are several sponsors. The extra bargaining power of a single sponsor may be problematic since any attempt to buy influence via the provision of funding will undermine the cocreation process and violate its normative foundation in free and equal participation and the force of the better argument. To avoid this from happening, it is important that several participants in a co-creation project act as cofunders to dilute and weaken the influence of one or more large funders.

Cocreation projects want to be able to attract wealthy sponsors and secure stable funding without giving external funders too much influence. These concerns may give rise to a series of trade-offs. Hence, large philanthropists have much money to give and can provide a steady stream of funding, but they may raise several demands that project must fulfill to get the money. By contrast, crowd-funding does not influence the content of the project at all but also does not provide a stable funding and the amount of money raised may be small. Again, this challenge may call for a combination of different funding sources.

Conveners of cocreation will have to approach potential sponsors to pitch the project. Building a good relationship to sponsors is paramount to receiving funding. Personal meetings help to build trust and bringing along visionary entrepreneurs with a good track record can help to stimulate interest in the project. However, in the end, everything comes down to the ability to write a good funding application. Most sponsors receive many applications and the competition for funding is often tough.

When writing a funding application to a potential sponsor, it is crucial to remember that the application is a sales pitch that must show that there is a pressing problem to solve and an important goal to achieve. The next thing is to demonstrate that the project will provide a new and feasible solution with a clear and measurable impact. Finally, it must be carefully explained who the convener and the project participants are and how they plan to work together to create solutions based on a realistic budget and a feasible plan. Table 9.2 provides some further advice on how to write good and successful funding applications.

Although funding for collaborative projects is highly competitive, it is important that fundraisers do not compromise their idea or project to make it fit a funder's priorities. Doing so may erode the motivation of the participants if they wanted to do something different. If there is mismatch between the project

Table 9.2. How to Write a Good Early-Stage Funding Application.

(1)	Get someone who has tried writing successful funding applications to help you
(2)	Keep the application short, and remember that less is more
(3)	Write in a plain and precise language while avoiding unnecessary jargon
(4)	Follow the format specified by the funder, and provide all the information that is asked for
(5)	Describe the problem and the proposed solution, the strategy for how to realize it, and if possible, provide evidence for feasibility and impact
(6)	Tell what you plan to do if you get the money, and what you will not be able to do
(7)	Describe yourself and the other actors who will contribute to realizing the stated goals and explain what resources they will bring to the project
(8)	Explain how you plan to evaluate the project and measure success
(9)	Ask for a specific lump sum or an amount of money over a period of time, and if this will not cover the full budget, explain where the remaining funds will come from
(10)	Get someone outside the team to read the application before sending it and ask them to provide constructive criticisms and look for errors or inconsistencies.

objectives and a potential funder, it is better to look for another funder who appreciates the problem that is going to be solved and embraces the goals of the project. Remember that time spent researching potential funders and their profile and priorities is never wasted but helps to avoid spending precious time making applications that are rejected.

Public and Private Financing of Cocreated SDG Solutions

Combining external funding with the resources and shared efforts of the participating actors may facilitate the development of new and promising solutions to pressing problems such as the provision of clean water and improved sanitation. The new solutions might even have been tested on a small scale and through discussions with experts, local communities and government officials. Now the big question is who will finance the implementation and operation of the upscaled solution in the years ahead? While funding is early, one-off and short term and the amount of money needed is limited, financing is continuous, long term and may involve much larger sums of money. Moreover, while ad hoc funding may be driven by idealistic concerns for supporting creative

problem-solving, financing of new and permanent solutions is driven by bureaucratic concerns about meeting demands and providing equal access to new solutions, while ensuring effective and efficient implementation. As such, it may appear to be more difficult to secure financing of new cocreated solutions than funding the cocreation process itself. This potential difficulty creates risk that new, promising and perfectly feasible cocreation projects will not be fully implemented and thus fail to meet social and planetary needs and achieve the goals that might have been accomplished. To avoid such failures, it is important to address the tricky issue of how to provide future financing of cocreated projects early on and perhaps explore whether some of the funders of the cocreation process may also want to play a role in financing the solution that emerges from the cocreation process.

In some countries, local government can be expected to pay for the implementation and continued operation of cocreated SDG solutions, especially if they can rely on stable grants from national or regional government, stable revenues from income or property taxes, or some kind of user fees (Akenroye, Nygård, & Eyo, 2018). However, the expectation that local government will finance cocreated solutions is not always met in reality due to limited state capacities, lack of taxing power, fiscal constraints, and widespread poverty that makes it impossible to rely on user fees. In some countries, international donor organizations may want to contribute to financing SDG solutions, but money is often channeled through cash-strapped government agencies that need to fill holes in their budget before they can start thinking about financing new and emerging projects that they have not planned and developed themselves. Fortunately, we have seen a steady rise of private financing of jointly created sustainability projects. The rest of this section looks at the public and private financing of cocreated SDG projects and presents different models that reflect the different motives of private banks, investors, and others who may help to finance worthy cocreation projects.

Different kinds of SDG projects require different amounts of financing. The most expensive projects involve the construction and operation of large infrastructures, for example, in the water, energy, transport, or health sectors. Projects aiming to provide particular community services or individual social cash benefits may also be expensive depending on their extension and coverage. At the less expensive end of the scale, we find schemes for public regulation of social and economic activities that merely require the establishment of an effective monitoring and control system that can ensure compliance. Although the price tag of different SDG projects may vary, the total costs are astronomical. Estimates suggest that financing the SDGs will require annual investments of around US$6 trillion, or US$90 trillion over 15 years (UN, 2017), and that is a lot of money, especially for the developing countries that will need to chip in. A part of this money will be used to finance projects and solutions resulting from cocreation, but who will actually provide the money?

Government: As a key provider of public goods, governments at different levels are expected to finance a large part of the investments in the SDGs. In order to leverage their budgets to finance the SDGs, government have to look at how existing programs can target them, how public money can be used more efficiently

to free up money for new SDG projects, and how tax collection can become more effective by reducing tax evasion and thus enhance the funds available for new efforts. Since the size of the tax revenues depend on economic growth, it is important for governments to stimulate economic activity in the private sector, although in ways that promote sustainability. At the end of the day, public financing of SDGs is determined by political priorities. How much money should the government spend on the military, policing, public administration, sustainable energy production, habitat protection, health, education, alleviation of poverty etc.? To help governments develop a realistic plan for financing the SDGs, it seems wise to establish a broad-based steering group that can conduct a baseline and gap analysis study and develop a realistic roadmap for SDG investments (Akenroye et al., 2018). While this type of preparatory work may not eliminate political prioritization, it will provide a sound knowledge base for political decisions about the financing of the SDGs.

Governments must often finance all of the cost of public regulation and service delivery but may succeed to attract special-purpose funding from international donor organizations to help shoulder the costs. Governments will also be in charge of financing large SDG-related infrastructure projects through public investment. If public funds are limited, governments will have to borrow money from the private sector and pay for the loans and the operation of new infrastructures by letting the users pay the marginal costs and by recovering eventual losses through the tax system.

As hinted above, governments are expected to produce and deliver public goods defined as goods that can be accessed and used by all or most people. Peace and security, public health, clean drinking water, bio diversity, environmental protection, etc. are examples of public goods that government must provide in order to prevent the under-production of public goods. Governments may gain considerable legitimacy and popular support from providing the amount of public goods that the population wants. Generally, democratic governments are more susceptible to popular demands because they want to ensure reelection. Sometimes, however, particular interest groups or a dominant class, caste or ethnic group may put pressure on government to pursue a narrow set of group-based interests at the expense of the pursuit of a broader set of interests such as the achievement of the SDGs. If that is the case, cocreation projects will have to think about how to create alliances with influential groups. Otherwise, negotiations with government officials who have followed a particular project and can see its merits may eventually secure public financing of new solutions that promise to solve pressing problems and achieve one or more SDGs.

When pitching a new cocreated solution to government, it might be a good idea to develop and submit a business case to help convince public authorities that the cocreated project is worth financing. Often public officials will be a part of the group of cocreators, but they may not have authority to give a green light for financing the cocreated project. However, they can help write the business case. If public agencies have already tested a prototype of a new solution, the business case will focus on why and how the prototype should be upscaled to enhance its impact.

There are many tools and sources that can help cocreation projects to write a good business case that can help to secure financing (Abrams, 2003; Pinson, 2008; Sahlman, 1997). However, in comparison with a normal business case written by a business entrepreneur and submitted to a private investor, a business case that aims to secure public financing (and perhaps integration into the public sector) of a cocreated SDG project will be less focused on customer analysis, marketing and sales plans, competition and profitability. The purpose of the business case is first and foremost to demonstrate that there is a pressing problem and unmet need, a well-tested and feasible solution, a good prospect for producing the desired impact with limited costs, and few and manageable risks.

Table 9.3 provides a list of some key components of a good and persuasive business case.

Private banks and investors: Considering the enormous need for financing the SDGs and the limited capacity of the public sector, the private sector must play a major role in financing SDG solutions and ultimately drive the transition to sustainability. Private financing may have come from several different sources. Banks may offer to lend money to government actors who are investing in SDG-enhancing infrastructures if projects generate a future income and can use tax revenues to cover possible. Venture capital is another source of financing new SDG solutions. Subsidiaries of banks, wealthy investors, and capital partnerships are examples of venture capitalists that might be persuaded to invest in new risky

Table 9.3. Key Components of a Good and Persuasive Business Case.

(1)	Executive summary
(2)	Documentation of the problems and needs addressed by the cocreated solution and a brief analysis of the context for solving problems and responding to needs
(3)	Careful description of the goals, content and scope of the cocreated solution, including how it improves upon existing solutions, and documentation of its feasibility
(4)	Short account of the people and actors behind the solution, their contributions, and the joint ownership that has been created through broad-based participation
(5)	Description of the target group, how it can be reached and what benefits it will receive
(6)	Description of the organizational and managerial requirements for delivering the solution, including the contribution of private for-profit and nonprofit actors and the role of the local community
(7)	Systematic assessment of the future impact of the solution, the risks that it will encounter and how these can be managed
(8)	Estimation of the costs and the needs for future financing including potential savings from other programs

solutions in the hope of receiving an above average return on their investment. Private investors may help finance SDG-related infrastructures either by buying shares in a public enterprise in which government holds the majority of the shares or by participating in a public–private partnership that may be based on a build-own-operate-transfer scheme (Ruiters, 2013). Finally, there are examples of projects such as off-shore wind farms that are financed by issuing shares to the general public that expects to earn a profit on its investment. This type of community-based investment is known as share capital.

A business case is also needed to attract or stimulate private investment. In this case, cocreation projects can rely on public actors to do the hard work of convincing private investors to invest in projects that will not only yield a net gain but will also help make the world a better place. Altruistic motives may not count for very much with private investors, but governments may take actions to change the calculations of private investors in order to make investment in sustainable development more attractive, for example, by setting an end date on energy production based on fossil fuels.

Blended Finance of Cocreated SDG Projects and Initiatives

In developing countries, where public funds are insufficient to finance the SDGs and official development assistance is not enough to close the estimated US$2.5 trillion per year gap in investments required to meet the SDGs, there is a huge pressure to mobilize private sector finance (UNCTAD, 2014). To this end, blended finance is emerging as an important strategy for funding the experimental prototyping of new solutions and the subsequent financing of their upscaling and diffusion.

As depicted in Fig. 9.2, *blended finance* combines financing from several different sources to support sustainable development outcomes. It uses money from public budgets and official development assistance provided by donor governments and private philanthropic foundations from the development to mobilize other sources of financing from the private nondevelopment sector including multilateral development banks, commercial banks, private pension

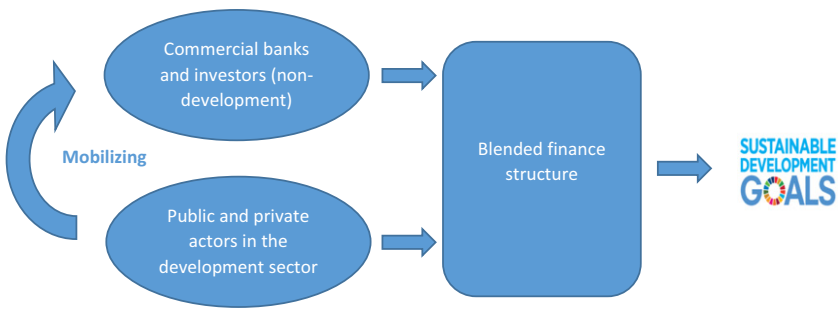

Fig. 9.2. How Blended Finance Works.

funds and venture capital. The underlying problem is that SDG projects backed by a sound business case may not attract sufficient private financing due to the risks associated with projects in more or less stable contexts and the uncertainties related to their future returns. Blended finance solves this problem by using public funds and development assistance strategically to improve the risk and return profile of investments in developing countries, for example, through the provision of grants, guarantees, equity, low interest loans, capped return schemes, etc. (OECD, 2017).

To illustrate, water storage and irrigation infrastructure in Sudan has been declining due to privatization that has lowered government subsidies and failure to collect water fees from farmers (African Development Bank, 2013). A new company – Al-Shamil – was formed in 2006 with 21% minority participation by the federal and state governments and 79% participation by private sector funds. Private funds were attracted partly by having government taking responsibility for major maintenance and overhaul work and by letting water fees being collected by a private entity rather than the government. While the former reduced costs, the latter changed the perception of water as a free resource, which in turn improved farmers' willingness to pay, thus increasing revenues. Hence, a mixture of government subsidies and governance reform stimulated private investment and helped to get the irrigation system back on track.

Another example is from Kenya, where the provision of water and sanitation to local communities has been expanded through blended finance. The government of Kenya and its development partners cannot provide the funds needed to cover the annual costs of investment and rehabilitation in water supply. The monetary gap has to be closed through private sector lending to local utilities, but commercial banks see the water sector as financially weak and unable to generate sufficient returns and the local utilities have limited contact with private banks, are unfamiliar with lending practices and have limited knowledge of what it takes to become creditworthy. Hence, the lending risk was considerable. These problems were solved through a combination of governance reform and new financial instruments that mitigated lender credit risk and improved financial viability of borrowers. New legislation created autonomous local utilities, ring-fenced the revenues with the water sector and enhanced the use of cost-effective water tariffs. Public authorities and development banks worked together to provide technical assistance to potential borrowers to develop business plans and loan applications, enhance and assess creditworthiness, and improve implementation and project performance. Finally, new tailor-made loan programs based on donor cofunding, partial loan guarantees and output-based grants helped securing access to commercial finance. The use of blended financing resulted in a massive expansion of access to piped water and growing productivity in local agriculture. Indeed, it was estimated that for each US$ 1 invested in the local utilities yielded economic benefits of US$ 3 to US$ 4 (Advani, 2016).

A recent report from the World Bank Group (Leigland, Trémolet, & Ikeda, 2016), demonstrates the potential impact of blended finance on the water and sanitation sector in other developing countries, and notes the positive benefits of additional commercial borrowing on investment discipline, external transparency

and accountability and the possibility to reallocate public investments to other sectors. Other sectors including fisheries, agriculture, transport, etc. are also amenable to blended finance that may help to enhance the commercial viability of infrastructure projects as well as the delivery of SDGs (Rode et al., 2019).

The number of blended finance donor facilities established between 2009 and 2016 tripled when compared to the previous 8 years and now amounts to US$ 31 billion (OECD, 2017). Recent reports estimate the total amount of blended finance has increased to more than US$ 50 billion. Continued support from the UN, the OECD, the World Bank and key players at the national level may further expand the use of blended financing, especially if they work together to raise awareness of the potential benefits of commercial finance and donors agree to use funds to catalyze rather than crowd out private financing. Institutional investors chasing returns in a low-interest environment may see blended finance that lowers the risk in emerging markets as a window of opportunity (Blended Finance Task Force, 2017). However, so far, the evidence base for blended finance is still quite limited (OECD, 2018), and further evaluation and analysis is needed to assess results and identify best practices in different sectors (see Andersen et al., 2019).

While, in principle, small cocreated infrastructure projects can be successfully realized based on blended finance, other local SDG projects that do not produce a return on investments cannot. However, the basic idea of blended finance might still be relevant since public financing and development assistance will often be able to mobilize monetary or in kind contributions from the private sector that together with the resource inputs from the plethora of cocreating actors will help to provide sufficient resources for the realization of local SDG projects.

Legitimacy Through Oversight and Fiscal Auditing

Since cocreated SDG projects tend to involve public actors and make use of public funding and finance, they will need to be regarded as legitimate by the public. Legitimacy of collaborative projects can be obtained by ensuring participation of relevant and affected actors ("input legitimacy"), establishing fair procedures for collaborative involvement in shaping joint solutions ("throughout legitimacy"), and creation of solutions that solve the problems at hand and achieve relevant SDGs ("output legitimacy") (Scharpf, 1999; Schmidt, 2013). While, arguably, cocreation is well suited for securing a high degree of public legitimacy, rumors and evidence of fiscal mismanagement, misconduct or corruption may rapidly undermine public support and discredit cocreation as a lever of change. The public will be swift to blame cocreation projects for their complex interrelations between manifold public and private actors engaged in informal collaboration that is hard for external actors to control.

To avoid a fatal loss of popular support, it is important for cocreation projects to maintain a high level of transparency, both with regard to process and results and with regard to fiscal performance. Popular support for promising SDG projects that result from multiactor collaboration will prevail as long as people

can see where the fiscal resources are coming from, how project funding and financing is spent, and who benefits from the results of the project and how and when. Hence, in the midst of collaborative engagement and creative learning processes, there must be a competent bookkeeper who can keep track of the fiscal sources and the money spent and is capable of reporting on the fiscal performance of the project in a transparent way.

While blended finance and other cofinancing arrangements seem to be compatible with the resource mobilization aspect of cocreation, these arrangements may create problems with ensuring transparency and preventing corruption. Demands for the availability and quality of information about project performance will tend to increase as more social, political and economic actors from different levels and sectors become involved in financing local SDG projects. Moreover, as the chains for delivering funding and finance grows longer and the number of financial intermediaries increases, it becomes increasingly difficult to ensure effective oversight and auditing.

In this challenging situation, clear and stable procedures for fiscal auditing of cocreated SDG solutions provide a key instrument for ensuring transparency, oversight, and public support. Projects may construct their own procedures, but in the midst of collaborative engagement and creative learning, it might be difficult for local collaborators to devote sufficient attention to establishing procedures for fiscal auditing. Hence, compliance with externally defined auditing procedures might be helpful for local development projects.

In China, the impact of and support for local poverty alleviation programs were compromised by inefficiencies in the use of funds and defective performance evaluation systems (Gao, 2012). As a result, the government introduced a new system of fiscal performance evaluation that assesses economies, efficiency, and effectiveness. The fiscal part of the evaluation looks at the time it takes for centrally allocated funds to arrive at the local project, the amount of the funds that are actually used to alleviate poverty and the level of the administration costs. The evaluation is based on review of collected data from internal and external documents, questionnaires and field interviews.

The African Development Bank (ADB) has developed a similar and even more elaborate procedure for fiscal reporting and auditing of development projects (African Development Bank, 2020). Projects financed by the ADB are required to maintain accurate records of all financial transactions and fully account for all incomes as well as the resources provided for different operations and purposes. ADB regularly evaluates the borrower's accounting system to verify that their standards and procedures are acceptable. This evaluation strategy serves to build and strengthen the financial management and reporting capabilities of the borrower and/or the project in question. The bank requests accurate and timely information on operational performance and financial status of all projects, but the content and scope of the financial statement vary depending on the type of entity to which the bank has provided loans. The annual financial statements submitted by projects to the bank must be audited by a competent independent auditing firm in order to certify the validity and reliability of the information and

data contained in the statement. The timing of the financial project reports is determined on a project-by-project basis.

Governments, development banks and other funding organizations may have competing standards for fiscal reporting and auditing and the demands for local accounting capabilities and procedures are considerable. Meeting these large and competing demands is a tall order for small collaborative SDG projects, but they may rely on expertise and capacities of local or regional government to ensure proper accounting and auditing. Project managers will also have to spend time on accounting and auditing of fiscal project transactions and changemakers are likely to see this as drain on creative problem-solving. Instead, they should rather see it as an investment in much needed popular support since no one will support projects with a reputation for financial mismanagement and misconduct.

Conclusion

While one of the key features of cocreation is its ability to mobilize public and private resources in the pursuit of noble ambitions such as achieving the SDGs, this chapter has argued that cocreation requires funding and financing. The initiation phase is relatively inexpensive, but the problem analysis, search for solutions and the prototyping of the most promising one can be costly. The partners in the cocreation process may be able to cover some of this costs by providing various forms in kind funding, but external fundraising will often be necessary.

Early-stage funding of the cocreation process may be provided by a broad range of donors including philanthropists and crowds without expectations of the money being pay back. Later in the process, when well-tested SDG solutions have demonstrated their value, proper financing of investments in physical, technical, and organizational infrastructures and the day-to-day operation of the new solution is called for. This type of long-term funding is usually provided by governments, banks and private investor based on contracts and with a clear expectation that loans and investments are paid back with interest. Governments may use blended finance that draws money from many different sources, either to top up public money or to stimulate private sector investment in sustainable solutions.

To get early-stage funding of cocreated SDG solutions, changemakers must learn to write persuasive funding applications. Likewise, to secure long-term financing of innovative SDG solutions, they must be able to produce a convincing business plan or know who can help them to do so. Because early-stage funding and long-term financing is provided from many different sources and used by public and private actors in unison, it often proves difficult to secure financial transparency and avoid corruption, which in turn may undermine the legitimacy of cocreated SDG solutions. Establishing clear and stable procedures for fiscal auditing is therefore indispensable.

Chapter 10

Implementing Solutions Based on Collaborative Adaptation

Abstract

This chapter examines how implementation of SDG solutions can be improved through adaptive strategies. Many so-called blueprint strategies are inflexible during implementation and underestimate the importance fitting general goals and plans to shifting local needs and contexts. The chapter emphasizes the importance of identifying the specific types of dynamic challenges that will prompt the need for adaptation when implementing sustainability strategies. Adaptive cocreation provides a valuable framework for overcoming traps of various sorts that may block implementation. The problem-driven iterative adaptation (PDIA) model is introduced as one approach to adaptation. PDIA is particularly valuable for achieving bottom-up integration of SDGs and projects. Finally, the chapter considers the importance of social learning as a strategy for collaborative adaptation.

Keywords: Implementation; blueprint strategies; adaptive strategies; problem-driven iterative adaptation; social learning; cocreation workshops

Collaborative Adaptation as an Implementation Strategy

The world rarely sits still as we go about the business of trying to implement sustainability solutions. New solutions must be adapted to changing conditions on the ground, as well as to new and unforeseen problems and events. New stakeholders appear at different stages of the implementation process, and new political roadblocks may materialize, calling for proactive countermeasures. Evaluation of implementation can lead to new knowledge that must be incorporated into the conduct of programs and projects. In addition, because no country can claim to be sustainable, the world community must collectively learn

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from the solution designs developed and implemented in different places. As the world changes, sustainability strategies must adapt.

Collaboration and cocreation can support adaptation during the perilous process of implementation. Consider Alianza Shire, a transnational partnership that has sought to develop energy solutions for a large group of refugees in northern Ethiopia. The partnership utilizes a cocreation approach to develop innovative strategies that meet the needs of both refugees and the host country. As the project has scaled up, the number of participating groups has increased, and Alianza Shire's own management structure has become more complex and has created more demands on participants. Luckily, trust among the partners has also grown over time, and the partnership's capacity to sponsor and facilitate experimentation has increased. In part, this is due to the emphasis the partnership placed on iterative adaptation over time, with a focus on continuous improvement and scaling (Moreno-Serna et al., 2020).

This chapter investigates some of the ways that adaptation can be incorporated into sustainability strategies, particularly during the implementation phase.

From Blueprints to Adaptive Cocreation

Recent evaluations of development practices suggest that "blueprint" strategies – where global strategies are uniformly implemented at the local level in a top-down fashion – often produce disappointing results (Andrews, 2013). Blueprint strategies that assume that one-size-fits-all underestimate the importance of fitting general goals to local contexts and needs. As described in Chapter 4, cocreation provides a useful framework for adapting promising global strategies to local conditions, allowing SDG strategies to be tailored to local contexts and to the realities of local politics. Adaptation, however, is not simply the act of embedding or aligning global strategies with local needs and realities but also of accommodating and robustly responding to the often uncertain and unpredictable nature of change processes. Blueprints do not easily adapt to the ever-shifting conditions that sustainability projects encounter.

The importance of adaptation in change processes has been widely recognized in research on governance, particularly in studies of the "adaptive management" of natural resources (Chaffin, Gosnell, & Cosens, 2014). However, we need to clearly distinguish the different types of challenges prompting adaption. Therefore, we begin our discussion by parsing the generic challenges that are important to consider in order to be adaptive when implementing sustainability strategies:

Changing environment, situation, or context. Social and natural environments are complex, dynamic, and even turbulent. This dynamism makes it difficult to focus or optimize stable governance strategies, though the surprise and crisis associated with this dynamism may also yield new opportunities.

Changing stage or phase of problem-solving. The classic literature on policy-making distinguishes between the agenda-setting, problem definition, policy-making, and implementation phases of the policy process and suggests that they create quite different challenges for governance. A large-scale example of an

adaptive implementation strategy is provided by the reform of the Indonesian irrigation system (Alaerts, 2020).

Changing management knowledge. The adaptive management model focuses on how to address the limited knowledge and uncertainty resource managers encounter in managing ecosystems (Lee, 1999). This concept of adaptive management suggests that managers not only need to revise and update their understanding about ecosystems as they collect new knowledge, but they also need to monitor their management interventions and adapt them as their knowledge of the ecosystem improves.

Changing social or political character of governance. As studies of collaborative governance and adaptive co-management suggest, the social system of governing itself changes over time. Trust, social learning, political conflicts, and shifting priorities can lead to the strengthening or weakening of social bonds among stakeholders, to transitions in who is involved in governing and to shifting priorities.

Changing externalities related to governing. Attempts to address one governance challenge may spillover to negatively impact other governance efforts or to create new problems, producing resistance or tradeoffs. Spillovers may also be positive and may reveal synergistic opportunities or the possibility of broader change coalitions.

Changing of revealed or downstream constraints. This point is similar to the point about the shifting conditions across different phases of the policymaking cycle. However, it calls attention to the fact that unexpected or unanticipated constraints tend to arise as governance strategies are developed.

While these implementation challenges suggest the need for different kinds of adaptation, a common theme is that adaption calls for greater collaboration among various parties. Successful adaptation to change requires alignment and coordination between different stakeholders and program components, lest chaos ensue. While it may often be possible to achieve alignment and coordination through hierarchy and authority, the sustainability agenda often calls for a highly distributed effort that encompasses many stakeholders who do not report to same higher-level authority. In fact, the existence of many hierarchical authorities – as opposed to one overarching authority – tends to accentuate the fragmentation of governing efforts. Therefore, collaboration tends to emerge as the de facto strategy for achieving alignment and coordination wherever power is distributed and authority is shared.

The character of collaboration needed for effectively carrying through sustainability projects will depend in part upon the types of adaptation challenges that collaborative groups face. Table 10.1 provides a diagnostic to help collaborative groups identity the specific types of adaptation challenges they may face and the implications these challenges may have for acting in both an adaptive and a collaborative fashion. In general, the diagnostic builds on the view that as the need for adaptiveness increases, so does the demand for cocreation.

This diagnostic is designed to help changemakers identify whether and how cocreation might help them to deal with implementation challenges.

Table 10.1. An Adaptive Cocreation Diagnostic.

(1) Is the environment, situation, or context stable or predictable over time? That is, are the conditions for implementation relatively delimited and unchanging in scope? If changing, is the change slow, steady, and predictable?
If yes. Conditions that are stable or that change in a linear or predictable fashion are more amenable to planned or off-the-shelf solutions. Thus, they can often be efficiently and effectively handled through routine administration, though periodic collaborative planning and implementation efforts may still be useful for bringing together relevant resources, enhancing coordination, for aligning relevant and affected stakeholders and for carrying out successful implementation.
If no. Unstable or shifting conditions will tend to frustrate planned or off-the-shelf solutions and to call for flexible and customized governance strategies. The more dynamic the context, the more that effective adaptation requires real-time cocreation and the more "reflect-act" cycles will be needed to effectively respond.

(2) Will the requirements for effective governance remain stable over time as the project, experiment, or program moves from conception to implementation to monitoring and evaluation? Are the financial, technical, and political requisites for successful governance stable and predictable? Are the same stakeholders involved and equally important in particular implementation phases?
If yes. This may mean that there is a stable core team that can draw up a relatively comprehensive plan that will guide the project from beginning to end. This is a highly desirable situation, but success will depend heavily on the quality and commitment of the participants in the core team. The capacity to anticipate the timing of project needs can facilitate the successful transition of projects and programs.
If no. Changing needs may be difficult to anticipate or there may simply be too many balls in the air simultaneously. In this situation, stakeholders must seek to flexibly incorporate new actors and to simultaneously manage multiple demands through cocreation.

(3) Do the key stakeholders have a comprehensive understanding of the issue and its implementation context prior to the intervention? Do they have a fairly solid understanding of how the system will respond to governance interventions? Are systems relatively similar in their behavior from place to place or at different points in time?
If yes. Comprehensive and solid knowledge about a system or about governance interventions makes more routine or expert

Table 10.1. *(Continued)*

administration possible. However, this knowledge may also make it clear *who* needs to be involved in collaboration, *when* and *how*.
If no. Weaker foundational knowledge often implies the value of engaging experts and lay persons in *knowledge cocreation* and also implies the importance of having the adaptive capacity to learn on an ongoing basis from interventions and the ability to flexibly adapt interventions and strategies as new information and learning becomes available.
(4) Are key stakeholders in agreement about the means and ends of governance? Do they share the same values and build on a reservoir of mutual trust and respect?
If yes. Prior agreement, shared values, and trust will allow stakeholders to move more quickly toward operational governance strategies.
If no. Where there is less agreement, value congruence, and trust, cocreation processes must build in opportunities for stakeholders to engage in deeper social learning, particularly early in the cocreation process.
(5) Can key stakeholders anticipate positive or negative externalities or downstream constraints that might arise from governance interventions?
If yes. Anticipation of externalities (positive or negative) or downstream constraints makes it possible to explicitly incorporate these parameters into implementation planning.
If no. When externalities or constraints cannot be easily anticipated, cocreation can build the capacity and flexibility to adapt to them as they arise. In this case, incremental/probing interventions that avoid irreversible decisions are often important, as is the ability of cocreation networks to access diverse resources and negotiate adaptive responses across these networks.

Adaptive Cocreation as a Strategy for Overcoming Barriers to Sustainability

Poverty and unsustainability often assume the character of "traps" – referred to variously as socioecological, capacity, rigidity, poverty, or policy traps. Such traps can block progress by locking in mutually reinforcing suboptimal situations (Boonstra & de Boer, 2014; Carpenter & Brock, 2008; Haider, Boonstra, Peterson, & Schlüter, 2018). To break out of such traps often requires a great deal of collaborative adaptability to address a set of interlocking challenges. First, change efforts often trigger resistance by stakeholders who fear loss from a changing status quo. Second, traps generally imply systems of interacting factors that must

be attacked at a system level. Third, system change often produces surprising results as taken-for-granted factors become disrupted, and unexpected interdependencies are revealed. The ability of collaborative groups to adapt in a timely fashion to emerging resistance, interacting variables, and surprising interdependence is likely to improve the odds of breaking out of suboptimal traps.

When development projects fail, it is often because they apply relatively superficial "best practice" strategies that get distracted by giving priority to form over function (Andrews, Pritchett, & Woolcock, 2013). Often such practices are promoted in an inflexible top-down fashion that can exacerbate the problems of responding to sustainability challenges. Research has found that transnational stakeholder partnerships associated with the SDGs have had weak bottom-up participation (Pattberg & Widerberg, 2016). Moreover, they often do not have clear agendas that can deliver on projects. Improved needs assessment, good process management, and effective monitoring and evaluation are important ingredients of more successful partnerships. Still, these partnerships will remain limited unless they can mobilize support and involvement from local partners.

Top-down implementation has the potential of creating "capability traps" for lower-level governments because local governments may not have the capacity to enact mandates (Mdee & Harrison, 2019). While top-down accountability is important, it can also subtly undermine local adaptation, which depends on the ability of implementing organizations to develop strong local ties (Campbell, 2018). Local stakeholders can contribute to implementation by helping to creatively adapt institutional designs to local conditions (Baiocchi, Heller, & Silva, 2011). For example, the management of lakes in Bangalore, India in collaboration with a coalition of community groups helped to break out of a "rigidity trap" by drawing attention to new opportunities and by mobilizing new actors and resources (Enqvist, Tengö, & Boonstra, 2016).

Problem-driven iterative adaptation (PDIA) is one framework that has been developed to describe how development work can be made more effective by adopting an adaptive approach (Andrews et al., 2013; Naidoo, Githiari, & Maposa, 2017). PDIA starts by adopting a problem-oriented (rather than solution-oriented) perspective, one that diagnoses concrete problems in their local context. Problem diagnosis typically entails identifying the multiple causes of specific problems and where possible identifying root causes. PDIA avoids settling on simple or optimal solutions that are often poorly aligned with actual local circumstances. Rather, it suggests the value of using experimentation to identify customized strategies that are politically and technologically feasible in order to develop context-appropriate solutions. Implementing such a strategy calls for the ability to learn from interventions and change course as necessary. It also highlights the value of iteratively improving strategies based on ongoing feedback. In other words, PDIA implies the use of prototyping as an adaptive strategy (see Chapter 8). Finally, the PDIA strategy emphasizes the importance of engaging a broad group of stakeholders in this process in order to enhance customization, harness feedback, and build wider ownership of solution strategies. The PDIA model is summarized in Fig. 10.1.

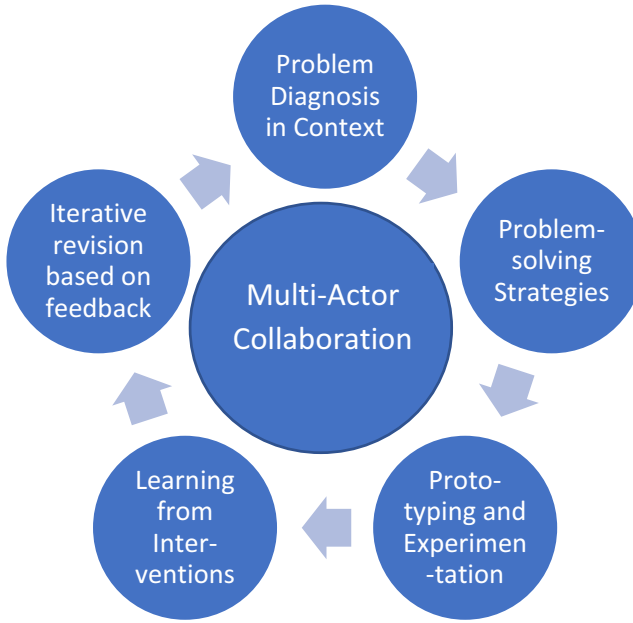

Fig. 10.1. The Problem-driven Iterative Adaptation Model. *Source*: Adapted from Andrews et al. (2013).

PDIA and related perspectives suggest the need to draw two typically contrasting features of problem-solving together with the aid of a third. On the one hand, addressing the systemic nature of problems requires a systemic approach that integrates the different components into a broad-based strategy that works simultaneously on multiple fronts. On the other hand, finding politically and technically feasible solutions to contextually specific problems tends to require more incremental (and hence less systemic) approaches that can address specific aspects and local particularities. Adaptiveness helps to bring the systemic and the incremental together through continuous alignment and adjustment.

One bit of guidance that has developed for multistakeholder partnerships is "get the front end right, do not try and predict too much and adjust as you go along" (Fowler & Biekart, 2017, p. 89). This perspective highlights the importance of building the "adaptive capacity" of groups. This adaptive capacity allows groups to unify incremental responses into systemic responses in a customized fashion, which often means mobilizing a range of resources or complementary sets of policies in response to shifting demands (Nair & Howlett, 2015; Orchard et al., 2019). Adaptive capacity is also commonly understood to be necessary for addressing multidimensional "wicked problems" (Van Epp & Garside, 2016). Complex, multidimensional problems and conflictual problems often produce

political blockages. By acknowledging interdependence, focusing on innovation, and striving for small wins, groups can work through these blockages (Van Bueren, Klijn, & Koppenjan, 2003; Termeer & Dewulf, 2019).

As these points suggest, SDG implementation is unlikely to be a one-shot process. Rather, it requires continuous adaptation to changing circumstances. Progress (or set-back) in achieving the SDGs will affect the strategies and priorities for subsequent efforts. There will be new lessons learned about effective and not-so-effective strategies; new stakeholders will appear and old stakeholders will become less relevant; and new ideas and technological innovations will present new possibilities for addressing old problems. Collaborative adaptation is a way of incorporating these changes into an ongoing framework of goal-setting, implementation, and monitoring and evaluation through continuous adjustment across level, sectors, and stakeholder perspectives.

Implementation is often blocked by external resistance from user groups, interest organizations, tribal leaders, government officials, NGOs, etc. To mitigate such implementation resistance, the actors involved in the cocreation process must act as ambassadors for new solutions by explaining their virtues and potentially positive impacts and by creating supportive alliances with external actors, including elected politicians and financial sponsors. Last, but not least, the implementation of solutions in which manifold resources are mobilized calls for coordination to avoid gaps and overlaps and create synergy and complementarities. Traditional forms of hierarchical and market-driven coordination must give way to pluricentric coordination based on alignment and high-intensity communication (Pedersen, Sehested, & Sørensen, 2011).

Collaborative adaptation can help to build legitimacy that authorizes action and reduces downstream implementation conflict (Fritsch & Newig, 2012). Collaboration can also help projects quickly appreciate and address their limiting conditions related to information, knowledge, or capacity. Because communities evolve as projects transition from early planning and innovation efforts through implementation and follow-up and because this evolution can produce negative or co-destructive outcomes, collaboration can assist communities to continuously align their efforts (Shaw, 2015; Jalonen, Puustinen, & Raisio, 2020). In short, collaboration can facilitate the adaptive capacity of communities.

Finally, adaptive governance requires review of feedback from interventions (Xue, Weng, & Yu, 2018). Monitoring has been found to be very important for successful implementation because it can allow continuous changes in program design if problems can be caught early in the delivery process (Beisheim, Ellersiek, Goltermann, & Kiamba, 2018).

In sum, the point of this section has been that effective approaches to the implementation of SDG solutions in turbulent environments must be adaptive in character, which in turn requires collaboration among key stakeholders.

Collaborative Adaptation as an Integrative Strategy

As many commentators have recognized, the SDGs potentially create "cross-sectoral" tradeoffs and synergies. On the one hand, there are significant tensions between the priorities embodied by the SDGs, particularly with respect to economic growth, environmental protection, and social and economic equality (van Zanten & van Tulder, 2020a, 2020b). These tensions are often accentuated by institutional fragmentation that encourages piecemeal approaches to sustainability issues, increasing the likelihood that pursuit of one goal may have negative impacts on related sustainability efforts. On the other hand, some goals – especially, SDG 1: No Poverty – are synergistic with many of the other SDGs, in the sense that successfully addressing this goal is likely to have positive benefits for the ability to achieve other goals (Kroll, Warchold, & Pradhan, 2019).

Ideally, the sustainability goals can be approached in an *integrative* fashion that mitigates tradeoffs and enhances synergies. There are many possible opportunities – indeed, imperatives – for simultaneously achieving gains in economic well-being and environmental protection. For example, sustainable fisheries or forests are essential for livelihoods and food security, which are in turn necessary for education and health (Duah, Ahenkan, & Larbi, 2020; Timko et al., 2018). Achieving integration, however, requires a more systems-oriented approach that appreciates the interactions among SDGs. Nexus-oriented approaches, for instance, stress the importance of working at the nexus of different domains where issues often intersect, such as "food-energy-water" (Weitz, Nilsson, & Davis, 2014).

While it is possible to identify these synergies and tradeoffs in an abstract fashion, it is difficult to provide a general plan for achieving effective integration among the SDGs. As explored in Chapter 4, the cocreation process can facilitate an integrative approach to the SDGs. While it may not always discover optimum solutions, the cocreation process mobilizes different perspectives on a problem and naturally supports consideration of multiple objectives. As a result, participants are often pushed to identify emergent solutions that will satisfy multiple needs and interests. Thus, cocreation is a process where synergies are identified and tradeoffs can be negotiated in a mutually adaptive manner (Horan, 2019).

One strategy for promoting policy integration of the SDGs is to promote ideas that stimulate holistic policymaking based on collaboration. Sometimes, this takes the form of imagining how a single core goal can serve as a meta-goal around which the pursuit of many other goals can be organized. For example, in Bogota, Columbia, education was used as a framework for the bottom-up integration of the SDGs (Andreoni & Ruiz Vargas, 2020). Another particularly prominent meta-goal is "health in all policies," which conceives of health as a common denominator that unifies many different policy domains. Urban health, for instance, is related to 38 SDG targets and, thus, a systemic "health in all policies' approach has the potential to advance progress toward many targets at once (Ramirez-Rubio et al., 2019). Implementation of a health in all policies strategy can build on a cocreation approach to establish a local "social contract"

around municipal plans (Von Heimburg & Hakkebo, 2017; von Heimburg & Cluley, 2020).

Cocreation can facilitate bottom-up integration of the SDGs by bringing together people who are focused on different SDGs. An exemplar of this process is the Lewa wildlife project in northern Kenya, whose original aim was to protect wildlife habitat. However, to do so, the project has had to work closely with local farmers to develop more sustainable farming techniques, promote community health care, encourage improved local water management, sponsor a women's microcredit program and an adult literacy program, along with several other initiatives (Jiménez-Aceituno, Peterson, Norström, Wong, & Downing, 2019).

In general, "landscape" or "place-based" approaches are particularly well-suited for combining cocreation with synergistic thinking about the SDGs (Axelsson, Angelstam, Elbakidze, Stryamets, & Johansson, 2011; Ayala-Orozco et al., 2018; Demblans, Martínez, & Lavalle, 2020; George & Reed, 2017; Hambleton, 2019; Tan et al., 2019). While such approaches often create their own dilemmas and are certainly not conflict-free, these challenges can be adaptively managed in ways that help to address potentially discordant goals (Feuer, Van Assche, Hernik, Czesak, & Różycka-Czas, 2020). Indeed, one of the valuable features of place-based cocreation for pursuing the SDGs is that it helps communities to recognize and take ownership over the types of mutual adaptations that might be necessary for advancing sustainability (Szetey et al., 2021). Innovation often surfaces tensions and problems that need to be addressed if significant change is going to be produced (Horan, 2019). Pursuing goals together can help to address both the tradeoffs and synergies that arise in pursuing sustainability (Weymouth & Hartz-Karp, 2018).

Possibilities for tradeoffs and synergies arise not only across the SDGs but also between global and local efforts to achieve sustainability. It is easy for local SDG projects to become misaligned with global SDG goals and vice versa. The global framework of SDG targets and indicators for achieving the SDGs are cast at a very general level and can be out of sync with what is happening at the local level. For example, high-level statistics about access to water often fail to capture the realities of local water access. At the same time, local efforts can drift away from global goals and end up pursuing limited, incremental, or local goals. Thus, continuous alignment between global goals and local projects is essential for avoiding tradeoffs and realizing synergies.

The importance of collaborative adaptation across levels of government has increasingly been recognized in the sustainability literature (Armitage, 2008). As with all forms of collaboration, it can be challenging, particularly as different levels of government have varying degrees of power that may frustrate true collaboration (Westskog, Amundsen, Christiansen, & Tønnesen, 2020). Both formal and informal linkages across governing levels are important for facilitating adaptive governance (Dressel, Johansson, Ericsson, & Sandström, 2020; Wyborn, 2015), and mutual learning across governing levels is often critical for success (Pahl-Wostl, 2009).

Collaborative Adaptation Through Social Learning

Ongoing learning about sustainability and collaboration are often at the heart of effective adaptive governance (Van Bueren & ten Heuvelhof, 2005). Learning that occurs within communities via processes of social interaction is typically dubbed "social learning" (Reed et al., 2010). Such communities can include both local and extra-local actors, and social learning is often conceived of as a process of trying to bring together local lay knowledge with expert knowledge (Djalante, Holley, & Thomalla, 2011; Rist, Chidambaranathan, Escobar, Wiesmann, & Zimmermann, 2007). Social learning has also been seen as crucial for bringing adaptive management together with the co-management of natural resources, "because adaptive management without collaboration lacks legitimacy, and co-management without learning-by-doing does not develop the ability to address emerging problems" (Berkes, 2009, p. 1698). An extensive literature has examined the connection between social learning and adaptive capacity, particularly for climate change adaptation (Biesbroek & Wals, 2017).

Significant innovation often calls for learning that results in the transformation of basic assumptions and participant orientations (Quist & Tukker, 2013). Social learning can shift assumptions in ways that increase the recognition of the needs of marginalized actors, a process which has been found to contribute to poverty alleviation (McDougall, Jiggins, Pandit, Thapa Magar Rana, & Leeuwis, 2013). However, assumptions are only likely to be transformed when participation is meaningful to participants (Marschke & Sinclair, 2009).

Transformation of attitudes or perspectives takes time, unfolds over ongoing interactions, and may face setbacks. For example, some research finds that as firms open themselves to engagement with stakeholders, their learning increases rapidly. But over time, learning tends to slow down and become more limited (Dentoni, Bitzer, & Pascucci, 2016). One interpretation for this dynamic is that firms become less open to learning from other stakeholders as they become more committed to particular sustainability strategies.

Cocreation can be used to draw participants into social learning. A study of local climate change adaptation among Vietnamese farmers, for example, found that a co-designed and cocreated social learning process strengthened local relations, increased knowledge of how others perceived climate change issues, deepened understanding of the systemic nature of the issue and knowledge of strategies of climate change adaptation, and improved trust in government – all of which can contribute to building adaptive capacity for dealing with climate change (Phuong et al., 2018).

Effective facilitation of cocreation is an important mechanism for achieving social learning, particularly where trust, human capital, and infrastructure are in short supply or where power differentials are strong (Cudnill, 2010; Van Epp & Garside, 2016). These factors can promote social learning by helping participants examine their basic assumptions, especially those related to social hierarchies and power relations (McDougall et al., 2013). Effective facilitation can enhance participant motivation, mitigate inequalities in participation, and encourage trust and nonhierarchical modes of communication (Rist et al., 2007).

Research suggests that facilitating deeper social learning processes depends on purpose-built governance frameworks that identify barriers to learning, evoke trust on the part of participants, and invest resources that enhance the capacity of participants to engage productively. Learning champions are important for enlisting and empowering the community, and civil society organizations can often help communities to engage in effective social learning (Fischer, 2017; Johannessen et al., 2019). For example, an Australian pilot project on "urine diversion systems" found that social learning was enhanced by facilitating community-oriented leadership, developing strategic planning exercises, and engaging participants in activities that introduced novelty, diversity, and external perspectives (Fam, 2017).

Social networks that share knowledge are also a source of social learning, particularly when they bridge across existing social divides (BenYishay & Mobarak, 2019; Phuong & Lampert, 2019). A study of Swiss social conservation found that farmer-to-farmer social learning about soil conservation was facilitated by transcending conventional political cleavages, by building a sense of mutual respect among farmers and experts, by nurturing communication that took participants outside their existing discussion topics, and by networks that shared local and tacit knowledge (Schneider, Fry, Ledermann, & Rist, 2009). Empowering boundary spanners who can bridge across partisan, farmer-expert, and interlocal differences is one valuable mechanism for promoting social learning.

Cocreation workshops, such as those associated with living labs, can be an effective way to stimulate learning – in part, by encouraging network formation. Although we should not expect a single short workshop to dramatically change people's fundamental perspectives, effective staging of workshops can assist with learning (Garmendia & Stagl, 2010). Role-playing games have been shown to increase both technical and socioinstitutional learning, and scenario workshops are another way to facilitate social learning in order to increase adaptation (Johnson et al., 2012; Salvini, Van Paassen, Ligtenberg, Carrero, & Bregt, 2016).

Joint activities can enhance learning. For example, a study of Cambodian fishing villages found that ecological knowledge was strengthened through Mangrove replanting, patrolling, and setting up fish sanctuaries. In general, the study found that learning how to do a specific task, like monitoring fishing, stimulated broader learning about how to address local problems, for example, by using monitoring in other areas (Marschke & Sinclair, 2009).

Not only is social learning a mechanism of adaptive governance, but social learning itself requires an adaptive approach, since it is an iterative process that unfolds over time (Johannessen et al., 2019). Social learning is most effective when it develops through multiple, iterative "reflect-act-reflect" cycles in a structured way (Van Epp & Garside, 2016). As social learning develops, it can expand the sense of the possibilities for subsequent collective action, and social learning gained in one situation can be used as a platform upon which to engage in more ambitious sustainability efforts (Berkes, 2009; Rist et al., 2007). Table 10.1 summarizes strategies from promoting social learning in ways that facilitate adaptive implementation.

Conclusion

Top-down implementation of "blueprint" strategies for sustainability often lead to stakeholder resistance, fail to align global and local goals, and produce unexpected externalities. This chapter suggests that adaptive strategies offer one viable alternative to these inflexible approaches. Adaptive strategies adjust action to particular contexts, addressing challenges that arise as efforts at sustainability are implemented. Sustainability initiatives encounter many different challenges that must be accommodated if the initiatives are to be successful. The world rarely sits still while nations and communities implement such initiatives, and the initiatives themselves often create resistance and conflict and produce unexpected feedbacks that can erode progress.

Often, sustainability initiatives must tackle social traps that reinforce suboptimal situations or many-dimensional wicked problems that frustrate easy or straightforward solutions. Such traps and wicked problems typically have a systemic character in that they are produced and reinforced by many interacting factors, including negative and positive feedback effects. In essence, addressing such challenges requires mobilizing the "system" and addressing its dynamic nature. Pairing adaptive and collaborative strategies enables a more flexible and responsive approach for dealing with these dynamic system effects.

A starting point for such efforts is to appreciate the kinds of change that sustainability efforts must grapple with. An extensive body of research on adaptive management focuses on how natural ecosystems change as the result of managerial interventions. As new information about the effects of an intervention become available, managers are adaptive if they use this knowledge to revise their intervention strategies. This type of managerial adaptation does not necessarily require collaboration. However, if we widen our view of the dynamic nature of the system to include community stakeholders and their responses to proposed managerial interventions, the value of embracing a strategy of *collaborative adaptation* become apparent. Fig. 10.1 provided a diagnostic for analyzing the responses to different challenges and the potential need for collaboration.

One of the major challenges of achieving the SDGs is fostering the type of integration across goals that overcomes negative interactions and takes advantages of possible synergies. Once again, however, doing so requires fostering system-level collaboration. Cocreation strategies can assist with this task by bringing together citizens and stakeholders with different perspectives, agendas, and resources and encouraging them to explore the possibilities for achieving synergies. Cocreation can help to reveal opportunities for synergistic action that are not widely appreciated or even imagined prior to collaboration. Often such possibilities become imaginable when different communities and disciplines are brought together to explore possibilities of cooperation. *Place-based* cocreation is often a particularly powerful strategy for encouraging integrative sustainability strategies.

Social learning is often the key social and political mechanism at the heart of collaborative adaptation in the implementation phase. How citizens and stakeholders learn from one another about the possibilities of working together in new

Table 10.2. Strategies for Promoting Social Learning.

Social Learning Strategies	Description
Promote meaningful participation	To encourage critical reflection and make participation meaningful to stakeholders
Encourage openness to learning	Encourage stakeholders to adopt and maintain open attitudes toward learning from others
Ensure effective facilitation	Exercise facilitative leadership in order to encourage critical reflection and reduce social barriers to learning
Build learning capacity	Invest time and resources in empowering participants to learn
Build and mobilize social networks	Support and activate social networks that can share knowledge, particularly across social divides
Convene cocreation workshops	Cocreation workshops can be used to engage stakeholders in processes and activities that encourage social learning
Promote iterative "reflect-act-reflect" cycles	Allow multiple opportunities for communities to engage in reflection as collaboration proceeds

ways to imagine and achieve ambitious ends is essential to the transformative agenda of the SDGs. Social learning is the grease that enables different social groups and institutions to engage in the adaptive give-and-take required by more integrative approaches to sustainability. Although social learning is rarely the mechanical output of organizing a cocreation workshop, cocreation can be understood as a framework for promoting social learning. Efforts to facilitate and promote social learning through cocreation can build on some of the lessons learned from past research, as summarized in Table 10.2.

Chapter 11

Evaluating Processes, Outputs, and Outcomes to Learn and Improve

Abstract

This chapter insists that evaluation of the process and results of cocreation is a precondition for continuous improvement and helps maintain support from external sponsors and funders. The main benefits of systematic evaluation of cocreation are learning and legitimacy rather than control and allocation. The chapter scrutinizes the two most common evaluation tools, formative and summative evaluation, and finds that they both fail to appreciate the emergent character of cocreation processes. The solution to this problem is to supplement formative and summative evaluation with developmental evaluation, which prompts the participating actors to engage in a critical interrogation of what they are doing, the reasons for doing it, and the results they achieve. Finally, the chapter explains how the commitment of developmental evaluation to using real-time data in the evaluation of change theories can be pursued through a collective impact strategy.

Keywords: New public management; process evaluation; formative evaluation; summative evaluation; developmental evaluation; collective impact

Why Should We Evaluate Cocreation?

Classical forms of bureaucratic government have always emphasized the need for public managers to ensure that public employees follow legal and administrative rules, operate within budget limits, and deliver services and solutions according to plan. Hence, despite their motivation to use their skills to solve public problems and create public value, public employees must be controlled to make sure that they perform as expected and in line with professional standards. The wave of

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New Public Management reforms (Hood, 1991) from the 1980s onwards criticized bureaucratic government for merely focusing on frontline workers compliance with bureaucratic rules and regulations and for failing to pay adequate attention to the results that are produced. Following this criticism, New Public Management recommended that bureaucratic rules and regulation be relaxed and more freedom given to local agencies and employees so that they could work more flexibly to improve efficiency, deliver effective solutions, and improve results (Osborne & Gaebler, 1992). The relaxation of compliance control was to be compensated by a more intense evaluation of the performance of local agencies and employees based on rigorous assessment of outputs and outcomes, regular reporting to central auditing agencies, and the use of incentives to affect future performance (Barber, 2007). Since New Public Management also recommended that public services were outsourced to private firms, performance evaluation was not only directed toward public agencies and their employees but also targeted private service contractors.

While evaluation has always been an integral part of the policy process, New Public Management has greatly enhanced the public sector's focus on evaluation. The number of public, semipublic, and independent auditing and evaluation agencies has mushroomed, and evaluation has become a regular and increasingly professionalized activity. New Public Management is mostly concerned with evaluation because it helps to *control* frontline personnel and prevents them from shirking and provides valuable information that can be used when making decisions about the *allocation* of public funds, for example, by shutting down low-performing agencies and boosting high performers. However, evaluation may also serve other noble goals such as enhancing *learning* and *legitimacy*. Evaluation of processes, outputs, and outcomes may spur learning by providing feedback that stimulates critical reflection, especially if evaluation is used in the early phases of a project and there is time to improve the process and correct errors, or if a project involves the design and testing of prototypes that are revised before they are upscaled. Evaluation may also enhance legitimacy by enabling project managers to produce a carefully documented account of what has been done and what has been achieved, thus ensuring public transparency and convincing sponsors, public authorities, and local communities that the money and resources have been spent well.

Learning and legitimacy are the primary benefits when cocreation projects are evaluated. Nevertheless, some people might object to the idea of subjecting cocreation to evaluation, either because they are afraid that the deployment of systematic and rigorous evaluation procedures may hamper the creativity of social entrepreneurs, or because evaluation appears to be a waste of time and energy since all the participants in cocreation are good hearted people who are doing their utmost to save the world. While we agree that a hard-handed, rigorous evaluation performed by external auditors may scare off the private, for-profit, and nonprofit actors who are participating voluntarily in cocreation projects, we shall insist that evaluation is strictly necessary for spurring learning and enhancing legitimacy. Social entrepreneurs and other actors involved in cocreation need to know whether the collaborative process is organized in ways

that stimulate innovation and build joint ownership and whether their more or less innovative solutions solve the problem at hand and preferably without generating unforeseen negative side effects.

Hence, if an evaluation of cocreation shows that the process is conducive for mobilizing ideas and resources and fostering innovative solutions that work in practice, the actors involved in the cocreation process can pat themselves on the back, recharge their batteries, and raise their ambitions. Conversely, if an evaluation detects problems and unexploited opportunities or finds that proposed solutions are not hitting the target, the involved actors may ponder how to improve the process through piecemeal adjustments and changes and how to redefine the problem and revise the action theory that projects and explains the likely impact of a particular solution. In both situations, the cocreating actors come out of the evaluation process as winners. In sum, the question is not so much whether or not to evaluate cocreation, but rather how to do it and who should do it. As such, the impact of purpose-built cocreation processes may be enhanced as a result of evaluation conducted by the involved actors. The dynamic relation between process, impact, and evaluation is illustrated in Fig. 11.1.

This chapter takes a critical look at different forms of evaluation arguing that cocreation may benefit from a combination of process evaluation, developmental evaluation, and the use of collective impact studies. More traditional evaluation tools such as formative and summative evaluation may also be applied, but as we shall see, these tools have problems dealing with the emergent character of cocreation.

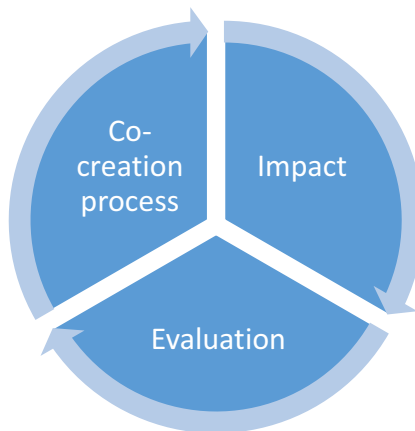

Fig. 11.1. The Dynamic Relationship between Process, Impact, and Evaluation.

Process Evaluation

Evaluation is a key to sparking ongoing learning about and improvement of cocreation processes in order to enhance their quality and impact while providing a solid account to external actors of how money is spent. Process evaluation is an ongoing activity that allows participants to assess and perhaps influence the factors that either promote or inhibit collaboration and the search for innovative solutions that can improve the conditions for social, economic, and environmental sustainability.

An easy way of evaluating collaborative processes that aim to develop innovative solutions is to use the self-evaluation tool proposed by Borden and Perkins (1999). This tool lists no less than 12 factors that may spur or hamper collaboration. Our adapted version of the collaboration checklist list is provided in Table 11.1.

Process evaluation based on the collaboration checklist is very simple. The members of the collaboration are asked to assess the 12 factors on a five-point Likert scale ranging from strongly agree (1) to strongly disagree (5). If the total average score of collaboration is between 0 and 30 points, most of the conditions for successful cocreation are in place and there is no reason to worry. If the total average score is higher, there is room for improvement and the actors participating in the cocreation process should discuss how to improve the conditions for successful collaboration. Some of the above factors are easier to influence than others. However, the important thing is not to eliminate all barriers to collaboration, but rather to constantly do what is possible to improve the conditions for successful cocreation.

Collaborative platforms supporting networked cocreation processes may be evaluated in terms of their capacity for knowledge aggregation, creativity, and decision-making. Mačiulienė and Skaržauskienė (2016) have studied 30 digitally supported collaboration platforms in Lithuania and find that six factors are worth evaluating in order to assess the effectiveness of collaborative platforms. The six factors are summarized in Table 11.2.

The evaluation of how cocreation processes can be effectively supported by collaborative platforms is still in its infancy, and there are no clear indications of the causal effects of the different factors cited above. Nevertheless, people who are in charge of designing collaborative platforms that aim to support cocreation processes may try to enhance the presence of the six factors mentioned above as a purposive way of stimulating learning, innovation and decision-making and evaluating outcomes. Platform design will often involve a good deal of experimentation until there is a good fit between the platform and the cocreation processes it is meant to support and enhance.

Formative Evaluation

When relevant and affected actors from the public and private sector are brought together to engage in a cocreation process, they will plan a broad range of activities that will help them to find a suitable solution to the problem at hand and

Table 11.1. The Collaboration Checklist.

(1) *Sustainable participation:* The collaboration has a plan for sustaining membership and resources. This involves membership guidelines about how to become a member, the expectations for the involvement and contribution of members, how members are replaced should they want to leave, and how new members are recruited if necessary.
(2) *Communication:* The collaboration has open and clear communication. There is an established process for communication in and between meetings.
(3) *Research and data collection:* The collaboration has conducted a proper assessment of local needs and has obtained information to establish its goals.
(4) *Political climate:* The history and political environment surrounding discussions and decision-making in the collaboration is positive and supports cocreation of new and innovative solutions.
(5) *Policies, laws, and regulations:* The collaboration has managed to change policies, laws, and/or regulations to allow the collaboration to function effectively.
(6) *Resources:* The collaboration has access to needed resources. Resources refer to four types of capital: Environmental, in-kind, financial, and human.
(7) *Catalysts:* There is a clear idea about the problems that call for collaboration and the mutual dependence between the actors that prompts them to engage in resource exchange.
(8) *Track record for collaboration:* The community has a history of working cooperatively to solve pressing problems, and there are positive experiences to draw upon.
(9) *Connectedness:* Members of this collaboration are well-connected and have established informal and formal networks at all levels that allow experiences, ideas, and resources to flow freely.
(10) *Leadership:* One or more leaders facilitate and support team building and capitalize upon diversity and individual, group, and organizational strengths.
(11) *Community development:* The local community has been mobilized to address important issues. There is a communication system and formal information channels that permit the joint exploration of issues, goals, and objectives.
(12) *Understanding community:* The collaboration understands the community, including its people, cultures, values, and habits.

Table 11.2. Evaluating Collaborative Platforms Supporting Cocreation Processes.

(1)	The *degree of openness and flexibility* reflects the diversity of the participants and is important for learning about needs and experiences that can stimulate creative problem-solving.
(2)	The *degree of diversity* concerns the adaptability of the platform to different groups and the different opportunities for disseminating and sharing knowledge, both of which support mutual learning.
(3)	The *degree of interdependence* relates to the opportunities for exchanging ideas about how problems can be solved and commenting on the content of these ideas.
(4)	The *degree of decentralization* reflects the existence of different forms of decision-making and the presence of equal rights for all participants to express their views and participate in decision-making. Involvement in decision-making is important to build common ownership for solutions.
(5)	The *degree of transparency* refers to the existence of a transparent organizational structure, clear rules and norms for self-organization, and a distributed memory.
(6)	The *degree of security* reflects the ability of the participants to anonymously voice ideas and opinions and the level of personal data protection. Security is important in order to facilitate dissent and protect the privacy of the participants.

thus achieve one or more Sustainable Development Goals (SDGs). The planned activities may include fact finding missions, problem definition workshops, public hearings with discussion of tentative solutions, consultation of external actors with special forms of expertise, small-scale testing of prototypes, meetings with organizations that may finance the upscaled solution, drafting of a comprehensive implementation plan, etc. The portfolio of planned activities will vary from project to project. While a few activities may be canceled and some new activities may be added, the participants and their sponsors will want to keep track of whether the bulk of their planned activities are realized and whether they contribute to driving the cocreation process forward. The participants may even define deadlines and milestones that must be reached in order to keep the momentum of the group intact and make progress toward the development of a solution that hits the target and enjoys widespread support.

Cocreating actors who are seeking to keep track of what they have accomplished and how their efforts bring them closer to goal achievement may consider using formative evaluation (Brown & Gerhardt, 2002). Formative evaluation aims to take stock of a particular project or process through regular assessments of whether planned activities have been carried out and milestones are reached. In addition, it aims to solicit feedback on past activities from users and relevant

stakeholders in order to improve the quality and impact of future activities. Finally, it seeks to identify the strengths and weaknesses of the project and to delineate the room for improving the project in order to increase its chances of realizing the overall goals at the end of the process (Beyer, 1995). As such, formative evaluation aims to prepare projects or processes for the final assessment of their achievements by measuring their performance against the expectations of the participants and the plans they have made for what to accomplish, how, and when.

The procedure to follow when conducting a formative evaluation of a collaborative process is relatively simple. First, draw up a complete list of planned activities and identify the related deadlines and milestones. Second, check whether the activities have been carried out as planned and met their deadlines, and if not, find out why this is so. Third, solicit feedback on the completed activities from internal and external actors, for instance, through focus group interviews or mini-surveys. Fourth, summarize the feedback and facilitate joint discussion of the lessons to be drawn. Finally, use the feedback and lessons to re-design future activities in order to improve their quality and impact. This procedure might be repeated at regular intervals to effectively revise the cocreation process and its outputs in ways that resonate with the expectations of the participants and increase the chance of fostering a desirable outcome.

Lessons about how to work collaboratively to achieve one or more SDGs may be shared with other interested actors. To that end, in 2016, the Finnish government asked the members of the National Commission on Sustainable Development and the Development Policy Committee how they intended to implement Agenda 2030 in the work they carry out within their own organization and in collaboration with other organizations. They were also asked what kind of new or innovative activities they had developed. This simple survey generated a large number of responses that were subsequently shared in order to inspire other actors to adopt new ways of working.

On a final note, it is important to understand that formative evaluation is not about reaching the summit, but rather about improving the process of getting there. Experienced hikers tend to stop at regular intervals in order to check where they are, evaluate the path they have taken, and take stock of their physical condition and energy level. Based on this brief evaluation, they make decisions about how to approach the new terrain. They may decide to slow their pace and choose a less strenuous route to maintain energy and to drink more water, change their clothing, and adjust their backpack to improve their performance. Hence, formative evaluation aims to improve the journey to ensure steady progress. Otherwise, there is no chance of reaching the summit.

Summative Evaluation

Hikers may not be satisfied with having had a pleasant journey if they do not reach their final destination and achieve the goal they set out to attain. The same goes for collaborative governance processes. It is nice enough for the involved

actors to be able to look back at a series of well-executed and worthwhile activities, but if the pressing problems that brought the actors together remain unsolved and the common goals are not achieved, all the hard efforts are not worth much. In problem-driven cocreation processes, goal attainment is crucial and in order to assess the extent to which the jointly formulated goals have been reached, the participating actors may consider to use summative evaluation.

Whereas formative evaluation is an ongoing activity that focuses on whether and how planned outputs are delivered, summative evaluation takes place at the end of the project or process and aims to assess the degree to which a given set of predefined goals have been achieved. A project may have several important goals that are fulfilled to a greater or lesser extent, sometimes displaying trade-offs whereby the realization of one goal negatively influences the achievement of another goal. A goal hierarchy may exist and might help to produce an overall assessment of whether the project as a whole has been successful.

Summative evaluation is not only comparing a pre-given set of goals with available data in order to measure the degree of goal attainment. It also aims to explore whether the final outcomes can be ascribed to the outputs of the project, and if so, what the causal mechanism relating outputs to certain outcomes is. Finally, summative evaluation also seeks to determine the conditions under which project activities and interventions have led to the realization of one or more goals in order to probe the possibility for generalization and scaling. The ultimate purpose of summative evaluation is to hold the actors involved in the process to account for their achievements and learn from the solution they produced.

The main barrier to summative evaluation in relation to the SDGs is the lack of precise operationalization of the goals and the lack of accurate data permitting measurement of progress. The UN has helpfully established 161 indicators designed to measure SDG progress. However, if national governments and their statistical agencies do not collect data relevant to these indicators, it becomes difficult to evaluate progress. Therefore, there is a need for each country to tailor UN indicators to national contexts. In Denmark, the 2030 Panel established by the national parliament has collaborated with Danish Statistics, Deloitte Consulting, university professors, and scores of private companies and organizations to find quantitative measures of the SDGs that seem relevant in the Danish context. This work has resulted in the report *Our Goals* (Danish Statistics, 2020), which contains 197 measures that allow assessment of whether Denmark as a country is making progress toward the achievement of the SDGs. The challenge is that even with goals tailored to the national context, it may be difficult to evaluate the contribution of local projects to these macroscopic indicators. Nevertheless, national indicators can provide important targets for local projects.

Other countries have established statistic platforms supporting the measurement of goal achievement in relation to the SDGs. One example is New Zealand, which has developed a new statistical policy indicator framework that goes beyond traditional economic indicators to assess the state of well-being of all groups in the population. This framework is to replace GDP as the lodestar for national policy making and will provide ongoing feedback to decision-makers at all levels about the effects of policies on the well-being of the population and its

natural environment. Another example is Armenia, which has established an SDG statistical platform to build data gathering capacity and routines in support of decision-making and goal assessment. Given the low level of statistical capacity only a few years ago, this platform marks a significant addition to the Armenian public sector's steering capacity. It also helps to build trust with the international community and foreign private investors.

Formative and summative evaluation is often used in tandem with formative evaluation helping to prepare a project for summative evaluation. The combination of the two evaluation methods is particularly useful for "blueprint" projects that have clear, predefined goals, involve implementation of standardized preplanned program activities, and have a definite ending point. None of these requirements are fulfilled in cocreation processes that stress curiosity, creativity, and deliberation. The emergent character of cocreation means that both goals and activities are subject to constant reformulation. Moreover, the wicked character of many sustainability problems means that the attempt to solve them is an ongoing activity with no clear end date. The actors are engaged in a continuous process of innovation and improvement, and projects tend to extend beyond what was originally planned, perhaps in new and different forms, or as parts of a larger venture. The lack of predefined goals and activities and a definite ending point limits the usage of formative and summative evaluation and calls for an alternative evaluation method that better fits the emergent cocreation processes.

Developmental Evaluation

Developmental evaluation offers an alternative to formative and summative evaluation that better aligns with the emergent character of cocreation. As such, it provides a mechanism for stimulating learning and adaptation in cocreation processes that aim to advance one or more SDGs (Feinstein, 2019; Reynolds, Gates, Hummelbrunner, Marra, & Williams, 2016). As indicated in Fig. 11.2, formative and summative evaluation are linear evaluation techniques taking place either at regular intervals or at the end of the process, whereas developmental evaluation is an ongoing activity that tends to force the actors involved in cocreation to move back and forth between goals, activities, outputs, and outcomes in order foster mutual adjustments as a result of mutual learning.

According to Patton, "developmental evaluation is designed to be congruent with and to nurture developmental, emergent, innovative and transformative processes" (2010, p. 7). Developmental evaluation recommends that cocreators undertake a continuous reality-testing of their changing assumptions, propositions, and ideas and thus offers a strategy for evaluation of cocreation that is compatible with its emergent character, which derives from the fact that problems, goals, activities, and solutions are shaped and reshaped through processes of mutual learning, collaborative innovation, and the chance discovery of new activities and solutions (Patton, 2010).

Developmental evaluation takes place throughout the steadily evolving cocreation process and is usually carried out by one or more team members who

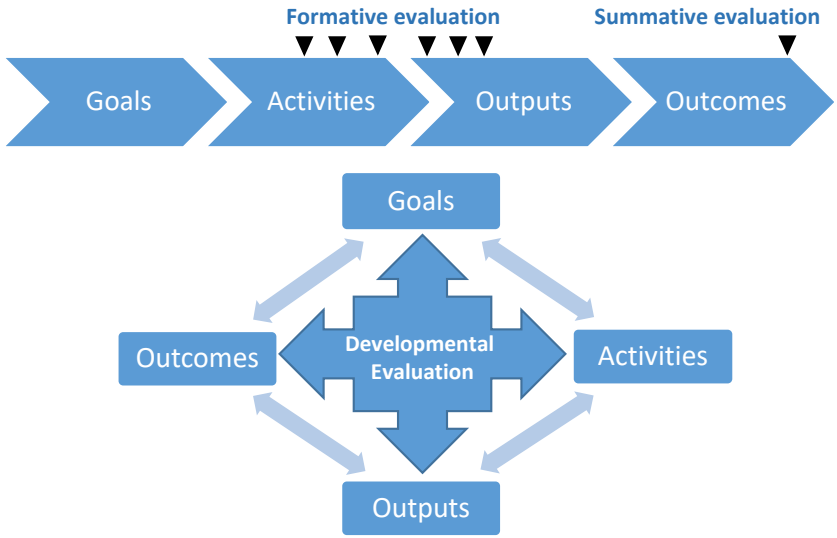

Fig. 11.2. Formative and Summative Evaluation Compared with Developmental Evaluation.

encourage their fellow collaborators to ask critical evaluative questions. Are we sure that we understand what the problem is? What is it exactly that we want to accomplish? Why are we doing things in this way? Do our assumptions about the preferred solution hold up? How do we know that? Is the proposed solution sufficiently robust? Will we be able to muster broad support for its realization? Have we secured adequate funding and financing? Do we have an efficient procedure for collaborative adaptation of the new solutions on the ground? Answering these and other evaluative questions based on a systematic collection and analysis of data will help to spur learning and innovation and thus enhance the problem-solving impact of cocreation.

In developmental evaluation, the cocreating actors test whether their causal assumptions about the sources of a problem and its negative effects hold in the face of a closer scrutiny that may involve empirical studies, consultation of experts, and empathetic involvement with those affected by the problem. They identify and seek to remove barriers to mutual learning, critically examine the range of possible options and the prospect for combining these into something new and promising, and they explore whether joint solutions produce the expected effects. Finally, they interpret possible signs that the problem is diminished due to the implementation of new solutions and critically review how new and unforeseen challenges are dealt with.

Developmental evaluation critically interrogates the goals, ideas, and propositions that emerge in the process of creative problem-solving by thinking through

their implications and testing them through real-life experiments and systematic data collection. Goals that have no relevance for the attempt to solve the problem, ideas that cannot be realized, and solutions that do not produce the expected results are challenged, reformulated, and submitted to a new test. As such, developmental evaluation confirms the idea that the development of robust solutions through active engagement of relevant and affected actors requires iterative rounds of goal formation, trying out solutions, and evaluation of impacts (see Andrews, Pritchett, & Woolcock, 2013).

Developmental evaluation does not assume that there is an ultimate solution or outcome of cocreation processes. Rather, it is asserted that outcomes are always provisional, conditioned by turbulent environments and subject to ongoing innovation. This assertion places learning at the heart of developmental evaluation. Its purpose is not to hold responsible actors to account for their action and inactions, but rather to learn more about the collaborative process and the attempt to define problems, design solutions, and ensure their practical realization (Mockbee & Newsham, 2013). Developmental evaluation is a learning-stimulating evaluation tool that invites participation actors to critically scrutinize what is working and what is not working in order to reformulate the goals and improve activities, outputs, and outcomes (Patton, 2010).

To illustrate the argument about the benefits accruing from utilizing developmental evaluation, let us briefly summarize the experiences from the Minnesota-based McKnight Foundation's Collaborative Crop Research Program (CCRP) (Moore & Cady, 2016). To fight the global food crisis (SDG 2), the CCRP promotes interdisciplinary research on plant science aimed at producing greater crop yields. Founded by private donors, it brings together over a 100 agricultural research projects from Africa and South America in an inclusive, multi-actor decision-making process involving scores of researchers, policymakers, farmers, and civil society organizations. The evaluators and program leaders work closely together to develop an adaptive action framework for evaluating activities, results, and impacts. Extensive work has been done to create a culture where people feel safe to seize every opportunity to ask: "What? So what? Now what?" The new practice of asking evaluative questions is supported by the development of a new data system, technical and conceptual skills, and procedures for communicating the interpretations of evaluative data. As a result of these transformations, the participants have gradually come to perceive the program and its projects as being in a "state of becoming" where new insights, activities, and results are regarded as work in progress. The overall experience with developmental evaluation is positive, as the embrace of emergence has spurred collaborative innovation while retaining fidelity to the overall mission.

Developmental evaluation of cocreation is sometimes met by the objection that it is difficult to get busy, action-oriented, and impact-driven actors to spend time reflecting on the process and impact of cocreation and the need to transform the *modus operandi*, modify the preferred solution and seek to make systemic changes. Our response to this recurrent objection is that critical reflection and mutual

learning are not external to but key ingredients of cocreation that rely on carefully orchestrated learning processes to foster innovative public value outcomes.

When a network of cocreating actors attempts to assess its collaborative processes and joint activities, it may use the process evaluation checklist cited above. The evaluation of the outcomes of cocreation appears to be more complicated. First, despite joint agreement on the overall goal, the actors may have different views of what constitutes a benefit or a cost vis-à-vis the common goal. They may have different normative belief systems that influence their judgments and their evaluation of the results and impacts of cocreation may reflect their relative net gains.

Second, cocreation projects often have intangible goals and produce intangible outcomes such as public safety, resilient communities, human wellbeing, holistic health care, sustainable agriculture, democratic empowerment, democratic legitimacy, etc. that are much more difficult to measure than the quantity and quality of public services or the growth in GDP. The measurement problem is intensified if the outcomes are only detectable in the longer term (Loeffler & Bovaird, 2018, p. 272).

Third, the tendency of cocreation projects to focus on broader societal benefits may hide the public costs that public leaders and employees may incur. These costs may include: the increasing time spent setting up the framework for cocreation and participating in and managing processes; large investments in ICT-enabled platforms and tools supporting cocreation; heightened costs of informing, instructing and training private actors engaged in cocreation; and rising expenditure resulting from growing ambitions and more intensive forms of cocreation and co-production (Loeffler & Bovaird, 2018, pp. 276–277).

A final complication when measuring the results of cocreation processes is the difficulty that emerges when assessing the trade-offs between different goals or between benefits and costs. Although there might be some form of joint leadership, cocreation arenas do not contain a hierarchical authority than can legitimately settle disputes and adjudicate the priorities that are made.

Despite these complications, developmental evaluation offers a welcome alternative to formative and summative evaluation that is compatible with emergent forms of cocreation. Systematic application of developmental evaluation is important as it helps to ensure the legitimacy of cocreation in the context of political demands that public money and managerial resources are not wasted on time-consuming collaborative processes that are nice and cozy but fail to generate results. It may not provide an ultimate verdict about whether and why a particular cocreation project was successful or unsuccessful, but it offers a fine-grained analysis of what proves to be working well and how it can be further improved.

Fast Learning From Collective Impact

Despite the strong commitment of developmental evaluation to testing the actual impact of the current theory of change against purposefully collected data, there is

a risk that the attempt to facilitate fast learning may drown in the myriad of evaluative questions that are asked and answered in relation to goals, activities, outputs, and outcomes. Failing to conduct ongoing impact studies that rigorously document the effect of cocreated solutions is a huge problem. Not only will the cocreating actors be in the dark as to whether their efforts are leading them in the right direction, but they will also be unable to report progress and learning to their sponsors and funders who are likely to require regular impact reports in return for continued political and economic support. To avoid these problems, this final section looks at how local cocreation projects can benefit from insights derived from collective impact studies.

Like developmental evaluation, collective impact embraces emergence by focusing on the ongoing progression, discovery, and learning that seem to accelerate social change without necessarily requiring breakthrough innovations and vastly increased funding (Kania & Kramer, 2013). Collective impact aims to spur fast learning obtained through ongoing feedback loops that use carefully collected data to detect changes and spur joint discussions of what is happening, how it is happening, and why it is happening. This allows the involved actors to draw lessons about how to make use of changing conditions to solve pressing problems and convert these lessons into collective action informed by slightly different ideas and visions. In practice, collective impact comes down to a dedicated effort to communicate real-time data through dashboards, weekly outcome diaries, or the production of running narrative that documents how the work is unfolding (Kania & Kramer, 2013).

The strength of the collective impact framework is that it clearly specifies the conditions for using continuous feedback and fast learning as drivers of creative problem-solving (Kania & Kramer, 2011). First, all participants must have a *common agenda*, including a common understanding of the problems and a shared approach to solving them through collective action. Without a common vision consisting of one or more goals and some ideas about how they can be accomplished, there can be no alignment and the collaborative efforts will lack purpose and have no impact. Moreover, if there is a vision, but no signposts, there can be no learning about progress, obstacles, new opportunities, and the need to adapt the *modus operandi*.

Second, the common agenda must be translated into *shared measurement*, and impact data must be collected consistently across all participants who should be invited to discuss what they see and what can be learned. The shared measurement has three crucial effects: it helps to align the actors by providing a common object for analysis that encourages joint deliberation; it strengthens horizontal accountability by allowing the actors to hold each other to account for results; and it facilitates mutual learning about current practices, what works, and what needs to be changed.

Third, the results of the fast learning generated through reflection on the ongoing collection and analysis of impact data must be disseminated through *continuous communication* to all participants so that they can all act in unison on the new insights, whether these point to doing more of the same, or to doing things differently in order to improve the impact. Capturing data-driven learning

Table 11.3. Conditions for Learning in Collective Impact.

Common agenda	A shared vision helps to guide learning
Shared measurement	Consistent measuring of impact creates joint focus on progress
Continuous communication	Communication of learning points facilitates joint action
Mutually reinforcing activities	Coordination of distributed action optimizes impact
Backbone support	Dedicated staff and special skills drive learning-based evaluation

Source: Adapted from Kania and Kramer (2013).

is not worth much if the lessons learned are not communicated, preferably in a way that stimulates collective action.

Fourth, *mutually reinforcing activities* must be spurred through efforts to coordinate the distributed actors. Hence, a mutually reinforcing plan of action must be drawn up to ensure that the participating actors respond to new knowledge and adopt new solutions at the same time, thus creating "cascading levels of linked collaboration between cocreation arenas, partner organizations and community members" (Hanleybrown, Kania, & Kramer, 2012).

Finally, all of the above must be supported by a *backbone organization* that is equipped with staff and specific skills to collect and analyze data, communicate learning points, and coordinate action. The backbone organization may either be a lead organization from the public or private sector or draw its staff from a representative sample of stakeholders. Table 11.3 summarizes the five conditions for fast learning based on ongoing feedback loops.

Like process evaluation, collective impact is an evaluation tool that can be used along with developmental evaluation. These three evaluation approaches focus on real-time rather than retrospective evaluation and aim to spur learning in order to improve the process and outcome of cocreation. In a nutshell, it all boils down to asking two questions: "How can we improve communication across partners?" and "What measures will show that we are making progress" (Weaver, 2014). Answering these fundamental questions will most likely help advance community-based change.

Chapter 12

Ensuring Accountable Cocreation of the SDGs

Abstract

This chapter argues that failure to secure accountability can be costly because it raises doubts about the fairness, salience, and impact of cocreation. Cocreation must establish accountability with respect to four different audiences: sponsors, relevant stakeholders, affected citizens, and the general public. The chapter discusses the challenges of trying to solely hold cocreation networks and partnerships accountable based on formal accountability mechanisms. It argues that these formal mechanisms must be supplemented with social and more informal strategies of accountability. Finally, the chapter considers how changemakers can strengthen social and informal accountability in and around cocreating networks and partnerships.

Keywords: Accountability; accountability audiences; formal accountability mechanisms; informal accountability; social accountability; accountable cocreation

Why Accountability Is Important

Goal 16 highlights the importance of transparency, accountability, and responsiveness in pursuing Agenda 2030. Moreover, the SDGs are guided by an underlying ethics that stresses that actors engaged in furthering the sustainability goals are responsible for the results and impacts that they produce and must ensure that those affected are not harmed by experimentation with new solutions. As in all human-centric change processes, accountability is an ethical and moral imperative. As a valuable strategy for solving complex societal problems and achieving SDG goals, cocreation must demonstrate its capacity to ensure accountability for its actions and inactions.

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While accountability is an ethical and moral imperative, it is also necessary for ensuring the legitimacy of sustainability efforts. Support for networks and partnerships that cocreate sustainability solutions hinges on the provision of transparent information about processes and outcomes and the explanation and justification of the impacts of new solutions on relevant and affected actors, who must be able to scrutinize, pass judgment, and sanction outputs and outcomes of cocreation (Bovens, Goodin, & Schillemans, 2014).

It is tempting for networks and partnerships to keep their goals, motives, and activities to themselves, either because it takes some work and energy to keep the outside world informed or because they want to keep competitors in the dark or avoid public criticism. Due to the informal and temporal character of many cocreation processes, there is often ample opportunity to avoid the provision of accounts to the general public. However, failure to secure accountability can be costly because it raises doubts about the fairness, salience, and impact of cocreation and what interests it serves. If a group of private developers, public administrators, and politicians join forces to develop a run-down neighborhood and do not inform and respond to concerns from local residents, this may create all sorts of rumors and speculations about dirty deals that may lead to resistance. Likewise, if a network of farmers and rural NGOs sets out to promote sustainable agriculture, its success may prove to be limited if it fails to make the case for its ideas and plans to other local stakeholders.

Finally, weak accountability can also prevent cocreation from receiving feedback that is vital for understanding social, economic, or environmental problems, pursuing a given set of goals, and producing intended outcomes. Suspicion about what cocreation does and who benefits can be more detrimental for securing support from society than the criticism that results from public account-giving. It can also make it more difficult for a network or partnership to get relevant and affected audiences to acknowledge its successes. Public skepticism can create a vicious circle of declining support that makes it difficult to operate legitimately and effectively, and subsequently makes it even more tempting to avoid transparency, scrutiny, and judgment from external actors.

Conversely, an accountable cocreation process stands a fair chance of creating a virtuous circle. Having to explain and justify what is going on (accounts) incentivizes the cocreating actors to perform well (efficiency). They may even learn something from responding to critical inquiries from relevant and affected audiences or the broader public that they can use to improve the impact of their solutions (effectiveness). In other words, having to give accounts can push and help a network or partnership to do better, which will enhance the support from external actors (Bäckstrand, 2006; Weech-Maldonado, Benson, & Gamm, 2003; Wu, Liu, Jin, & Sing, 2016). Support, in turn, can make it easier to communicate with external audiences in productive and constructive ways, completing the virtuous accountability circle shown in Fig. 12.1.

However, formal accountability mechanisms based on access to information and opportunity to monitor and sanction a cocreation process are not always in place, and if they are, they are rarely sufficient to secure strong accountability. Ensuring accountability depends on the actual responsiveness of the members of a

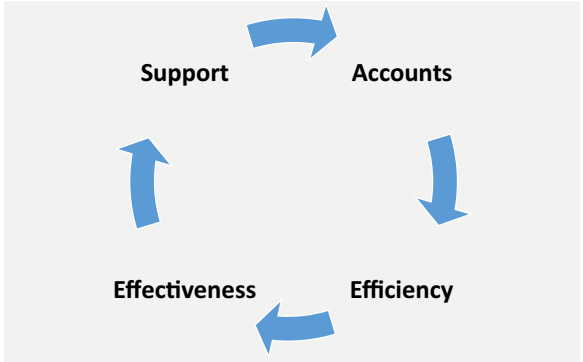

Fig. 12.1. The Virtuous Accountability Circle.

network or partnership and on the efficacy and social capital of relevant and affected audiences, which is again a product of the way and the degree to which they interact with each other (Brinkerhoff & Wetterberg, 2016; Fox, 2015; Wetterberg, Brinkerhoff, & Hertz, 2016). In other words, the quality of an accountability relationship hinges on the extent to which the cocreating actors and relevant and affected audiences possess the self-confidence, skills, and resources needed to play their part. Building this capacity is an important side-product of virtuous accountability circles.

This chapter considers what changemakers can do to promote virtuous accountability circles around cocreating networks and partnerships. First, we consider to whom a cocreation should be accountable. Then we discuss the limits to formal accountability and the prospects of promoting the social and informal accountability around networks and partnerships, before we conclude with some recommendations regarding what changemakers can do to strengthen the accountability of cocreation processes, thus honoring the ethical and moral imperative of leading change.

Accountable to Whom?

An important consideration for cocreation is to whom the process needs to be accountable. In other words, cocreation partnerships need to identify their accountability audiences (Bovens, Goodin, & Schillemans, 2014). While there is considerable variation in the context, goals, and impacts of local partnerships, most partnerships may benefit from being accountable to some, and maybe even all, of the following accountability audiences: sponsors, public, and private stakeholders, affected citizens, and the general public (Collier, 2008; Ehren & Perryman, 2018; Lee, 2004; Sørensen & Torfing, 2005). Sponsors are those external actors who finance or authorize cocreation, including international donor organizations, government agencies, business foundations, or philanthropists. Public and private stakeholders are those formal organizations or informal groups

that have a clear stake in the matter at hand and have an active supportive role to play if cocreation is to succeed in its purpose. The affected actors are those who experience the positive or negative consequences of cocreation in their everyday lives. A final accountability audience is the general public, which includes all those local actors who are not directly interested in or affected by the cocreation but who are members of the community that cocreation aims to influence. Put differently, a cocreation can secure a combination of upward, inward, downward, and outward accountability through engagement with these four audiences, as illustrated in Fig. 12.2.

Upward accountability to sponsors is particularly important if networks or partnerships rely on financial, political, and moral support from powerful public and private actors. Failure to provide sponsors with information and accounts about activities and results or allow them to monitor and critically scrutinize these accounts may undermine sponsor support, which can lead to withdrawal of political support and future funding. The need to secure upward accountability tends to be self-evident when government is the main sponsor of cocreation partnerships, such as in the case of community policing and the governance of public schools in Chicago (Fung, 2001). The institutionalization of a system of "accountable autonomy" around these partnerships emphasizes the close connection between upward accountability to government and the local

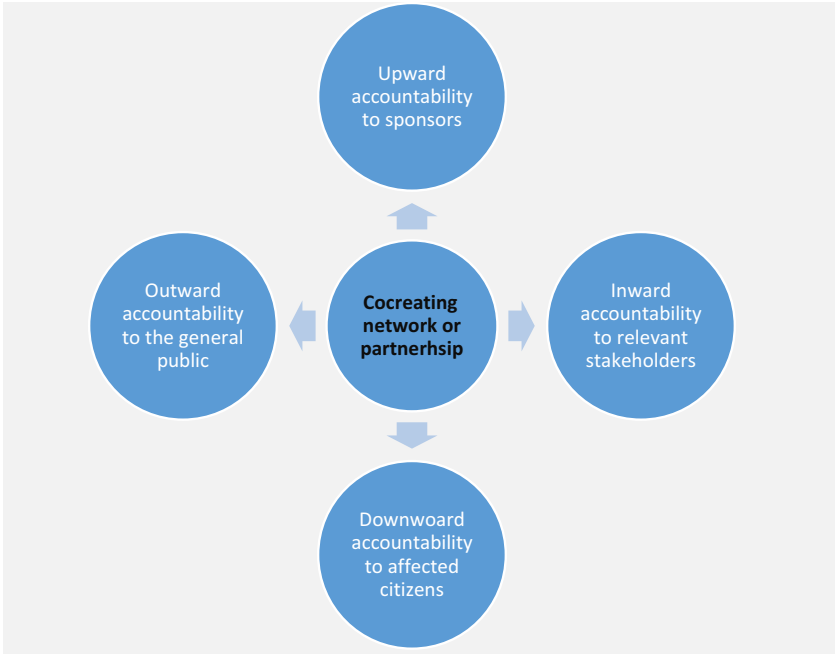

Fig. 12.2. Four Key Accountability Audiences.

autonomy that a cocreation partnership enjoys. This upward accountability may be less self-evident when there are many small sponsors with a limited or mainly informal authority, and when there are no formally institutionalized accountability procedures in place. However, it is equally important for a partnership to secure upward accountability in those situations, and as we shall see later, local changemakers can do a lot to make it happen.

Inward accountability is also important. Accountability to public or private stakeholders is inward when these stakeholders are members of the cocreating networks and partnerships and hold each other to account. These stakeholders typically possess a certain expertise or professional competence or share a common goal or interest and they may include public agencies, trade unions, professional or scientific communities, voluntary organizations, business associations, religious groups, organizations representing service users, neighborhood committees, or village councils. Even if they are not formally obligated to do so, the individual participants are often under some pressure to explain and justify their behavior as well as the general performance of the partnership or network to each other. In addition, individual stakeholder groups must often report back to their own organizational constituencies. Facilitating these accountability connections is important for the overall success of cocreation because stakeholder representatives must be able to sell the cocreation project back home in order to mobilize resources and commitment. Portuguese Agenda 21 programs for sustainable development faced accountability problems in many localities where they failed to mobilize support and commitment from local stakeholder groups (Fidelis & Pires, 2009).

Downward accountability flows from a cocreation partnership to those actors who are affected by its interventions. The affected actors include both the potential beneficiaries and those who may be experiencing the negative impacts of the project. Critical feedback from these groups is crucial for designing solutions aiming to achieve one or more SDGs. A focused effort to provide information about planned interventions and to explain what the cocreating actors are trying to achieve can reduce the level of uncertainty and anxiety among affected groups. Moreover, downward accountability provides networks and partnerships with practical insights that they can use to match partnership aspirations to the local context. A study of 15 projects aiming to empower poor women in India provides a case in point. The most successful projects drew on insights from the women themselves (Kilby, 2006). Dialogue with the end users proved equally important for a partnership project aiming to improve public transport for low-income citizens in Tanzania (Sohail, Maunder, & Miles, 2004).

While networks and partnerships tend to pay considerable attention to the need for some degree of upward and inward accountability, they often overlook the importance of being accountable to the affected actors. The incentives to do so are often weak. Cocreating actors have a strong incentive to be accountable to their sponsors who have power to stop or reduce political or financial support. There are also strong reasons to be accountable to involved stakeholders who may consider to withdraw their participation and to mobilize resistance. By comparison, the incentive of networks or partnerships to provide accounts and respond to

the concerns and judgments of the affected actors will tend to vary according to their ability to apply pressure. Educated, resourceful, and well-connected actors are often better able to pressure a cocreation partnership to provide precise and regular accounts and to mobilize public resistance if they detect problems in these accounts. Affected actors with fewer resources, including women and minority groups, are not in the same situation and there is considerable risk that cocreation will not do what it takes to harvest the benefits of downward accountability (Collier, 2008). In short, there are in-built inequalities in accountability processes that are not only problematic in the light of Goal 10's efforts to reduce inequalities, but are also harmful for the ability of creation to achieve other SDGs.

The final accountability audience for cocreation networks and partnerships is the general public. There are cocreation processes that may have reasons to avoid drawing public attention. This may be the case when the goals they pursue are broadly perceived as illegitimate in the local context, when partnerships exclude certain key stakeholders or when cocreation is likely to produce significant negative externalities (Steen, Brandsen, & Verschuere, 2018). Yet, if the goal is to contribute to solving pressing local problems, networks and partnerships have a lot to gain by promoting *outward accountability*, which is important even if publicity might result in heated public discussion. A proactive media strategy makes it possible for a cocreation to frame the public debate around its goals and activities, to start the dialogue early on when it is easier to be receptive to public criticism, and to mobilize support and recruit ambassadors. While secrecy severely harms the reputation of cocreation, openness and transparency can help to brand a project in ways that capture the attention of sponsors and organized stakeholders and boost the backing from the local community. Such a strategy was successfully pursued by a network working to promote the building of a bridge between Denmark and Germany. From day one, it used all available means to spread the word to the general public and to participate in public debate using old and new social media. Based on this feedback and interaction, the network revised the cocreation strategy and managed to influence public decision-makers (Torfing, Sørensen, & Fotel, 2009). However, as the intensity of media communication increases, it becomes more difficult and demanding to capture and maintain public attention, stage a productive dialogue with the public, and signal responsiveness to public judgments. In particular, it can be difficult to find a way to communicate information and give accounts that do not live up to the demand for simple stories that stir emotions and communicate conflict, drama, heroes, and villains.

Challenges Related to Holding Cocreation Partnerships to Account

Despite the fact that those who cocreate SDG solutions can benefit from being accountable to different audiences, the accountability around many networks and partnerships is weak. This is the case in wealthy as well as in middle- and

low-income countries (Acar, Guo, & Yang, 2012; Westhorp et al., 2014). It is tempting to suggest that the remedy is to introduce formal accountability mechanisms that sponsors, organized interests, end users, and the general public can use to monitor, scrutinize, criticize, and sanction those participating in networks and partnerships (Kilby, 2006; Westhorp et al., 2014). Formal accountability mechanisms such as budgetary control, mandatory activity reporting, and process transparency can definitely strengthen the accountability around cocreations. Sponsors can control how a partnership uses the granted funds and autonomy for the intended purpose; public and private stakeholders can make sure that they like what they see; and citizens can get the insights they need to demand an explanation and contest cocreated activities and outcomes. These positive benefits of formal accountability mechanisms are summarized in Table 12.1.

Formal accountability mechanisms are no panacea. They do not necessarily strengthen the legitimacy of public and private organizations nor render them more effective (Christensen & Lægreid, 2015; Molecke & Pinkse, 2017). However, formal accountability mechanisms also tend to be better suited to holding individual organizations to account than interorganizational partnerships and networks. Organizations are formal entities with rules and procedures, hierarchies, operational capacity, and reward systems that commit its members to stay put and do their job even when they do not feel like it. Cocreation processes are informal ad hoc collaborations between a changing set of actors, and it can be difficult to pin the responsibility for decisions made and actions taken on specific actors and to come up with reliable justifications. It is rarely completely clear what precisely is decided and for what reasons, just as it can be uncertain who is responsible for making the decisions and for carrying them out. In other words, the distribution of authority and responsibility for getting things done tends to be relatively messy, random, and opaque in networks and partnerships compared to individual organizations, and this difference tends to reduce the efficacy of formal accountability mechanisms (Papadopoulos, 2007).

Table 12.1. Potential Positive Impacts of Formal Accountability Mechanisms.

Formal Accountability Mechanisms Can:
• Give sponsors access to informative accounts about how the cocreation partnership has used its funding and adhered to its mandate
• Grant public and private stakeholders opportunities to investigate how partnership activities align with their own interests and their own professional norms and standards, as well as with overall project objectives
• Offer affected citizens and the general public a right to raise complaints against a network or partnership, ask the involved Actors to justify their actions, and openly criticize them in ways that potentially harm their reputation

Another complication is that efforts to impose strict formal accountability mechanisms can discourage public and private actors from joining forces to solve local problems. Although formal accountability is important, strict detailed budgetary control and demands for process documentation and reporting of results places a large burden on the actors engaged in networks and partnerships. Control systems also tend to send a message of distrust that will demotivate and maybe even offend local actors. Actors engaged in cocreation processes take part on a voluntary basis and put in hours that they could have used for other and more private purposes because they want to solve concrete local problems and make things better for themselves and others. Exit options are plentiful and it is tempting to opt out if working together becomes too troublesome.

Finally, formal calls for extensive openness and process transparency can harm the functionality of a network or partnership. Put bluntly, cocreation between actors with different ideas, perspectives, and interests hinges on some degree of secrecy and seclusion. When external actors can follow the discussions among the members of a network or partnership, it becomes more difficult to develop and agree on shared goals and strategies since this often depends on compromise. Outside spectators make the members more prone to stick to fixed positions, which hampers mutual learning, innovative exploration of new ideas, and negotiation of solutions to a given problem. Hence, while some degree of process transparency is indeed crucial for securing accountability, full transparency can end up reducing the value addition of networks and partnerships, which is to get local actors to join forces to solve local problems and promote the SDGs (de Fine Licht & Naurin, 2016).

A widely used strategy for managing the relationship between transparency and the need for some degree of privacy in negotiations is to establish a degree of separation between front-stage and back-stage cocreation – i.e., between what goes on in public to satisfy external accountability audiences and in private discussions where stakeholders will be not negatively judged for compromise (Klijn, 2014). A secluded arena for private discussions may facilitate negotiations but may also push cocreation toward exclusivity. Table 12.2 summarizes the potential downsides of formal accountability.

Table 12.2. Potential Negative Impacts of Formal Accountability Mechanisms.

Formal Accountability Mechanisms May:
• Be less effective because of the informal, Ad hoc, and fuzzy character of cocreated governance
• Create administrative burdens that are difficult for some networks and partnerships to shoulder and thus may discourage participation
• Send a signal of distrust that demotivates otherwise highly motivated and engaged people from joining forces
• Hamper compromise formation based on stakeholders concessions or may push stakeholders toward exclusive back-stage privacy

Taken together the potential positive and negative impacts that formal accountability mechanisms can have on mobilizing and supporting local actors to cocreate SDG solutions indicate that they should be used with some caution. Moreover, they point to the need to look for other additional ways to strengthen the accountability of networks and partnerships.

Strategies for Promoting Accountable Cocreation

A promising alternative to overburdening cocreation with formal demands for openness, transparency, oversight, and sanctioning is to supplement formal public accountability with more social and informal accountability mechanisms. These mechanisms strive to achieve accountability by building a strong external accountability environment and supportive norms that reinforce accountable behavior.

Social accountability refers to the ability of local communities to hold governance actors to account. It presupposes both the ability of governance actors to produce accessible, nontechnical accounts of their action and the capacity of local communities to digest and critically respond to these accounts (Fox, 2015). This mutual relation between governance actors and communities depends on the empowerment of both parties, with some critical questions: How self-confident and capable are the participants in cocreation when it comes to keeping external actors informed and responding to their concerns and judgments? And how comfortable, skilled, and well-connected are the different audiences when it comes to seeking information, passing judgment on the accounts they get, and sanctioning a network or partnership accordingly? These questions suggest that it is far from easy to create social accountability.

It is a challenging task to boost the self-confidence and capability of cocreating actors so that they can explain their actions to people who have not been involved in the collaborative process. Many networks and partnerships shy away from trying to justify their decisions and actions because the issues at stake involve complex dilemmas and a difficult balancing of conflictual concerns and interests. Instead, they come up with partial information and simplified accounts to cover up the difficult choices, although doing so may result in the surge of distrust among competent audiences that detect weak points in the storyline. Moreover, it is tempting to cover up or blame others for failures and negative unintended side effects rather than explaining what went wrong and engaging in discussions of how to remedy flaws and make things better (Hinterleitner, 2020).

The value of investing time and energy in giving accounts and qualifying these accounts in dialogue with critical audiences is illustrated by the experience of a small town in Denmark, where the attempt by a network to build a culture house met heavy resistance from many citizens. To curb this resistance, the network spent several Saturdays in front of the local supermarket and on the pedestrian street arguing their case and responding to different concerns. This practice helped them to gradually enhance support for the project among the local citizens (Sørensen & Torfing, 2003). Building the self-confidence and capacity needed to

give thorough and trustworthy accounts requires a lot of learning-by-doing. Cocreating actors must learn how to communicate the motivation and reasoning for their definition of problems and the solutions they have chosen. They must see that engagement with critical feedback can be productive for generating project support.

Another way to promote social accountability is to make different audiences comfortable in seeking information about what a network or partnership is doing, asking for explanations, challenging these explanations, and imposing sanctions. These actions require courage, skill, and social capital. Courage is necessary to step into the role as critical audience, and people need skills to sort through piles of information and cut to the core of accounts provided by actors with an eloquent tongue. It is also difficult to hold anyone to account if you are alone. Alliances and trust-based social ties are of key importance for community empowerment. A case in point is when a Ugandan community of NGOs representing those affected by the HIV/AIDS pandemic used their social capital to successfully challenge the provided services (Awio, Northcott, & Lawrence, 2011). In the same way, citizens successfully used their connections to hold local governments in Sub-Saharan Africa accountable for their service delivery (Ogentho, Munene, Kamukama, & Ntayi, 2020).

Levels of social accountability associated with networks and partnerships vary considerably. When both the cocreating actors and their audiences are capable participants in the accountability relationship, there is a fair chance that there will be relatively strong accountability even when the formal accountability mechanisms are limited. Yet, this is not necessarily the case if a network or partnership is self-confident and capable but the audiences lack courage, skill, and social capital. Nor is it the case if communities are empowered but the cocreating actors are unable to produce accessible account and respond productively to community queries and demands. Hence, to secure legitimate and effective SDG cocreation, it is not only important that both sides in an accountability relationship know how to play their part, but that they both have the ability to do so.

A potential weakness of social accountability is that communities may not have power to sanction unaccountable governance actors who produce problematic solutions. A partial remedy to this weakness is that higher-level regional or national governments may step in and force local governance actors to be more responsive (Fox, 2015; Sørensen & Torfing, 2021). Government can add teeth to the bite of local communities aiming to hold governance actors to account.

We have already noted that networks and partnerships follow a different *modus operandi* than organizations. They are plural and voluntary groupings of actors working in more informal ways. Hence, the introduction of formal accountability mechanisms may be counter-productive because formal obligations and administrative burdens can discourage people from investing their time and energy. A promising alternative that may complement social accountability is to strengthen the *informal accountability* around such processes (Romzek, LeRoux, & Blackmar, 2012). Informal accountability is a product of the expectations that condition an accountability relationship. When cocreating actors and their accountability audiences have high expectations about giving and getting

accounts, informal accountability will be strong. Informal accountability comes in the shape of explicit and tacit norms and rules regarding the appropriateness of particular behaviors and perceptions of what counts as good and fair behavior. Pertinent questions include: How is a network or partnership supposed to communicate with different audiences, and how is it perceived as appropriate for these audiences to express their opinion and react? Over time, these expectations turn into routinized patterns of action that people use as a manual for what counts as good and fair, and which may even travel to other networks and partnerships as a part of the baggage that local actors carry with them into other cocreation processes.

When the informal accountability around a cocreation process is strong, networks and partnerships will be expected to make significant efforts to keep their different audiences well-informed and to be responsive to their concerns and criticisms. Likewise, accountability audiences will be expected to seek and scrutinize information and voice their opinion. When a network or partnership fails to meet these expectations, it can seriously harm their reputation, and an accusation of failing to be accountable will be a serious sanction. Fear of such reputational damage can spur accountability even when there are few formal accountability mechanisms in place. This informal accountability mechanism was observed in the case in the provision of public goods in rural China (Tsai, 2007), and in multisector service delivery collaborations in a number of US counties (Romzek, LeRoux, Johnston, Kempf, & Piatak, 2014). However, it can also be costly for accountability audiences when they are passive and do not uphold high accountability expectations. As a result, they may be viewed as disengaged and incompetent. Over time such passivity may not only weaken the attention paid to a given accountability audience, but also reduce the general level of informal accountability. Table 12.3 summarizes the key properties of the actors involved in social and informal accountability.

Table 12.3. Important Actor Properties in Social and Informal Accountability.

	Cocreating Actors	**Audiences**
Social Accountability	Are confident that they can explain themselves and possess the know-how to do so	Are courageous and skilled and have the social capital needed to seek information, and question, criticize, and sanction networks and partnerships
Informal Accountability	Are expected to go a long way to keep their different audiences well-informed and to be responsive to their concerns and criticisms	Are expected to seek and scrutinize information, voice their opinion, and problematize the reputation of networks and partnerships

While formal accountability mechanisms impose duties and rights on actors in an accountability relationship, social accountability empower actors with the efficacy and responsibility to fulfill these duties and exercise their rights, and informal accountability encourages actors to have high expectations for accountable relationships.

Building Social and Informal Accountability

What can a changemaker do to strengthen social and informal accountability in and around a cocreating network or partnership? This question has no easy answer, and the solution cannot be achieved overnight. It involves building a well-functioning accountability relationship that thrives on the mutual empowerment of account-givers and their accountability audiences and requires formation of strong norms about the need for the actors to invest in playing their respective roles in the accountability relationship. In short, social and informal accountability requires both capacity-building and a transformation of what is considered appropriate action. It goes without saying that strengthening social and informal accountability is a gradual step-by-step process.

Changemakers have a key role in creating the conditions for social and informal accountability. If social accountability is weak at the outset, it is important to proceed with caution and look for low-hanging fruits in terms of situations where dialogue between the members of a network or partnership and one or more of its audiences is likely to go well because the level of tension is low or moderate. Even in this situation, it is important to select topics that are relatively easy to talk about, where there is a fair chance that the audiences will be able to understand and digest the information and accounts they receive, and where the cocreating actors are not overly sensitive to criticism and scared of sanctions. If there is a marked imbalance in the level of empowerment between some of the participants, it can be useful to prepare and train groups for such engagements. This is particularly relevant when children or young people are involved.

Positive experiences with engaging in a mutually productive accountability relationship on easily addressed topics can encourage the members of a cocreation process to continue to proactively engage with their accountability audiences and empower such audiences to seek accountability in other situations. Harvesting low-hanging fruits in this way can improve social accountability for the involved actors to a level that makes it possible to promote accountability around more difficult and contentious topics. In other words, changemakers have a key role to play in designing and upscaling the dialogue between a network or partnership and its accountability audiences in a way that gradually empowers both to engage in the creation of accountability around the cocreation of SDG solutions.

Changemakers also have an important role to play in promoting informal accountability. The main objective is to create and maintain high expectations regarding how much information a network or partnership will provide; how and to whom it is communicated; how they will respond to critique and concerns; and how different audiences will react. Although expectations are products of concrete

experiences, they are also shaped by how we talk about what constitutes good and fair behavior. Changemakers can emphasize that close and continuous dialogue with external actors is both valuable for building legitimacy and promoting effective problem-solving and something that is expected and in line with common practice. Promotion of rituals and traditions of accountability can over time make people regard accountability practices as normal routines. Creating "rules-in-practice" is how accountability is built into the architecture of a cocreation process. Over time, such rituals and traditions can spread to cocreational practices in all corners of a local community. They can take the form of regularly held workshops where the cocreating actors and relevant and affected audiences discuss matters of concern. They can also come in the shape of interactive webpages or other social media platforms that become a locus for spreading information and raising concerns.

Table 12.4. Recommendations for Strengthening Accountability of Cocreation Arenas.

- Pay attention to how accountability can enhance the legitimacy and effectiveness of cocreated efforts to promote the SDGs
- Regardless of whether or not formal accountability mechanisms are in place, build the social and informal accountability needed to promote accountable cocreation
- Make sure that networks and partnerships are accountable to all relevant accountability audiences, including those who have a limited ability to impose sanctions
- Protect the cocreating actors against administrative burdens associated with formal and other forms of accountability
- Give networks and partnerships ample opportunity to exchange and develop ideas and negotiate goals and solutions in private discussions, but beware of the danger of exclusivity
- Spread information about the mission pursued by the cocreation processes and its different activities through social media
- Encourage the participants in networks and partnerships to engage in continuous dialogue with the different accountability audiences – especially those who are skeptical
- Use carefully designed events and processes to train the involved actors to competently play their part in the accountability relationship
- Emphasize the importance and appropriateness of providing information, giving accounts, and allowing community actors to critically scrutinize and sanction these accounts
- Normalize and routinize practices that bolster accountability and integrate them into all the different phases of the cocreation process

Another way to integrate accountability into the everyday practice of cocreation is to make a habit of conducting focus group interviews with selected audiences or hosting open house meetings that create an opportunity for the general public to raise questions and the cocreating actors to respond. Such routinized activities can help to keep expectations high. A downside is that they tend to be burdensome because it takes time for the cocreating actors as well as for the audiences. Therefore, changemakers will need to carry much of the practical burden associated with organizing such activities, and also with preparing relevant and affected actors to take part in them.

Conclusion

From the points made in this chapter, it is possible to tease out a list of recommendations that changemakers can draw upon in promoting accountability around the cocreation of SDG solutions. The recommendations listed in Table 12.4 stress that securing accountability should be a continuous concern of cocreators and an inherent part of all cocreation processes.

Chapter 13

Leading Local Cocreation of SDG Solutions

Abstract

This chapter argues that despite the horizontal and self-organizing character of cocreation processes, leadership is essential for initiating and facilitating collaboration and securing the production of effective SDG solutions. Leadership is defined as a two-way street between leaders who guide their followers and enable them to reach their goals and followers who provide valuable input to leaders in a bottom-up process. Five crucial leadership functions are identified and the role of power in leadership is discussed. The chapter also considers the particular strategies for leading cocreation networks and partnerships and the skills and competencies necessary for pursuing these strategies. Finally, the chapter describes the importance of building leadership capacity through the recruitment of leadership teams.

Keywords: Leadership; leaders; leadership functions; power; leadership competences; interactive leadership

The Importance of Leadership

The cocreation of local SDG solutions is all about collaboration, which is "horizontal" in the sense that none of the involved actors can dictate what to do and how to do it. The actors' sense of interdependence and necessity is what commits them to work together and honor joint decisions. The absence of formal hierarchy, however, does not imply that there is no need for leadership in cocreation. Leadership refers to an effort to assist a given group in formulating and pursuing a collective goal. In the case of cocreation, what leaders do is to produce narratives that surface and clarify interdependencies, create a sense of shared destiny, emphasize the advantage of collaboration, build trust and mediate

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conflicts, and highlight and celebrate achievements to encourage further collaboration. This kind of cocreation leadership calls for rhetorical and entrepreneurial skills rather than hierarchical authority based on command and control. Leadership enhances the likelihood that a group of actors will join forces and create something together. Sometimes attempts to cocreate fail because the forces that divide a group of actors are stronger than the ones that keep them together. At other times, the lack of leadership explains why collaboration fails to materialize or to produce expected results.

In previous chapters, we have explored what changemakers can do to get actors to cocreate solutions to local problems and promote the SDGs. In this chapter, we frame this activity as a specific form of leadership. We explain what leadership means in the context of cocreation and clarify how it is exercised and why it is important. We also discuss how it is possible to lead otherwise self-governing networks and partnerships, how to build the necessary leadership capacity to do so, and who might be able to exercise cocreation leadership. We conclude with a set of recommendations for changemakers who aim to engage networks or partnership in the promotion of the SDGs.

What Is Leadership?

Leadership refers to a relationship between leaders and their followers. Leaders are those who are able to muster support for a collective project from a group of actors, and followers are those who look to a leader for guidance (Uhl-Bien, 2011). Research has different understandings of what leadership entails. Some regard leadership as an ability to achieve a goal through and with others (Buell, 2012) while others view leadership as enabling a group of actors to formulate and achieve their own objectives (Nye, 2008). Each of these understandings captures central aspects of what leadership entails. Leaders may also have their own agenda and mission that motivate them to encourage others to take action, such as the realization of one or more SDGs. However, in order to be able to lead others, it is necessary to understand and speak to the needs and aspirations of followers and to advance their ideas and experiences in developing a viable strategy for moving forward (Burns, 2003). Leaders rarely have all the necessary answers, but they can identify them through dialogue with their followers. In this sense, leadership can be seen as a dynamic alliance between leaders and followers. In short, *promoting the SDGs through the leadership of a group of local actors involves guiding and enabling them to reach specific goals while simultaneously learning from and actively engaging them.*

From this follows that leadership differs from management, which is more about ensuring that people do what they are obliged to do. Leadership involves a conscious effort to mobilize a group of actors, inspire and motivate them to act collectively, give direction to their joint endeavors, create momentum by promoting and supporting joint activities, boost the impact of such activities and celebrate successful outcomes to encourage further action. Theories of leadership

Table 13.1. Five Key Leadership Functions.

- Create a group – Construct a "we"
- Diagnose a pressing problem or aspiration – Create a necessity
- Propose a solution – Give direction
- Mobilize for action – Secure resources
- Generate results – Achieve and broadcast success

identify five key leadership functions, which are summarized in Table 13.1 (Burns, 2003; Tucker, 1995).

First task is to *create a group with "we" identity*. The members may face the same problems or have similar dreams and aspirations, or they may find themselves in the same situation at a given point in time. Maybe they live on a street with bad air quality, or in a neighborhood haunted by crime or they might lack adequate health care. It can also be that they are concerned about the education prospects for their kids, dangerous working conditions, or unsanitary water supplies. Leaders help a group of people recognize their commonality – be it a problem or an aspiration – that distinguishes them as a group and motivates their joint action. If the group identity is already strong, this group-forming leadership function may be less important. When stakeholders are more dispersed or divided, leaders play a crucial role in forming of group identity. This task is particularly challenging if the potential members of cocreation process belong to different organizations or groups and where the formation of group identity is challenged by deep-rooted antagonisms. For example, it can be difficult to get people with different religious beliefs or socioeconomic backgrounds to focus on shared problems and aspirations, even if they share the inconvenience and health hazards related to living on the shores of a heavily polluted river.

A second, somewhat overlapping, leadership function is *problem diagnosis* that aims to set the agenda for joint action by means of describing present problems or unrealized potential for improvement. If the goal is to achieve the SDGs, the problem diagnosis requires leaders to help identify the issues or factors that block or hinder sustainability in particular local contexts. Helping a group of people think about the shortcomings of the present and the promise of the future is important because human beings tend to accept the status quo out of habit or resignation. Most of the time, people focus on their immediate needs without questioning even highly troubling basic conditions, and when they do question them, they may make demands that do not reflect their real needs. Coal miners who protest mine closure hardly enjoy the hard labor and risks of mining. What they need is a job and maybe even one that is fulfilling. Engaging a group of people in a discussion of their problems, fears, and dreams, and linking these discussions to the SDGs, can help set a common agenda for shared action.

The third leadership function is to *inspire and guide a shared search for solutions* to the problem at hand that contributes to meeting the aspirations of the involved actors as well as to those of the leader, i.e. to create a more economically,

socially, and environmentally sustainable world. Just as it tends to be necessary to push actors to think about what it is that they need and do not get, it is important to actively stimulate peoples' ability to think beyond existing alternatives and engage them in a joint exploration of new and more productive and effective ways to make things better. Earlier, we described how cocreation can stimulate innovative thinking but did not consider the role of leadership in getting people to look for and test new strategies. Leaders can stimulate the search for solutions by asking probing questions. Sometimes leaders will highlight the benefit of incremental adjustments to existing practices, for example, by asking "how to make it easier for homeless people to find a shelter to get them off the street?" At other times, leaders may have a more bold and radical ambition, asking questions such as "how do we reduce the number of homeless people?" These questions should direct and inspire participants to think about workable solutions that are responsive to the local state of affairs. Sometimes an incremental approach to a problem creates a momentum for more ambitious projects.

A fourth leadership function is to mobilize the followers to *implement the new solution*. This function requires creating broad support for the solution as well as empowering those who must act to make things happen. Winning support for a solution calls for a focused effort to convince people that the proposed solution will make their lives better and enhance sustainability. Empowerment entails assuring followers that they can implement the solution and that collaboration and adaptive learning are the key to success. It may also entail training people to master specific tasks, giving them hope and building their courage and self-confidence. Getting the first people to commit themselves to implementing the solution may take a lot of persuasion and strategizing. People tend to be reluctant to be first movers out of fear that they will fail or be exploited by so-called free riders who want the benefits of the new solution without contributing. If the goal is to stop people from dumping their garbage in the local river, few will change their practice unless they are sure that others will do the same, and even fewer will push for viable alternatives in terms of a local garbage collection system. In these situations, leaders often build support by using the tactic of referring to the conditional support of other actors. Another tactic is to give first movers the status of pioneers and then recruit them as ambassadors for getting more people onboard.

The fifth and final leadership function is to *generate results*. Regardless of how successful a leader is in mobilizing local followers, their support will be short lived if the cocreation does not produce results valued by participants or society at large. The results do not have to be exactly the intended, but they must give the participants something that they need or free them from their burdens. Highlighting the achievement of preliminary and partial results to keep people onboard is an important leadership skill. For example, if a river has become somewhat cleaner but not completely clean, leaders must be able to celebrate those who produced the improvement to demonstrate the efficacy of the group. Highlighting related achievements can also help to maintain support and mobilize people for action even when these achievements are not strictly an outcome of the activity in question. Since results are often mixed, they tend to trigger critical

voices that leaders need to address. Although addressing such criticism can be challenging, it can also convey invaluable information that can help improve cocreated solutions.

These five leadership functions indicate that leaders play a crucial role in promoting collective action, and that serving these functions relies on an ability to form a group of people and get them to do something that they would otherwise not have done. In other words, leadership involves the exercise of power, although it is a particular form of power.

The Role of Power in Leadership

In traditional understandings of leadership, the basic idea is that leaders decide and followers obey. Leaders secure compliance from followers through a skillful use of "hard power," i.e. the disciplining and punishment of those who do not follow rules, orders, and instructions. Leaders may also use "soft power," which refers to an ability to get others to want or accept what you want and thus to recruit committed followers. However, in most traditional accounts, soft power was viewed as secondary to hard power (Dahl, 2017; Machiavelli, 2003; Weber, 2019). In the last decades of the twentieth century, this approach to leadership met increasing criticism for being not only ineffective, because sovereign leaders tended to make decisions that were not seen as legitimate and tended to produce resistance.

New understandings of leadership emerged that turned things around by introducing what Nye (2008) calls "smart power." A smart power approach to leadership views soft power as the most effective and legitimate leadership tool, while hard power is seen as a supplement that should be used in small doses and with considerable care because it tends to scare away followers. Hard power resources are mainly valuable for capturing the attention of followers, but soft power is what steers a group of people in a certain direction by setting a concrete agenda and framing action (Rothman, 2011). Helms (2014) goes as far as to state that hard power is what leaders use when they have failed to lead by means of soft power. Among the soft power tools available to leaders are positive inducements that motivate followers to act in a desired way. These incentives can include financial support or other kinds of rewards or advantages. Another tool is to form the hearts and minds of the followers through the production of captivating narratives that add meaning and direction to people's lives. These narratives may include the promotion of organizational missions that serve the public or create public value.

The early twenty-first century saw the formulation of an *interactive* approach to leadership (Sørensen, 2020). Building on the smart power approach to leadership, this new strand of leadership parts way with the idea that leadership is a matter of getting followers to comply. It claims that we cannot understand leadership without understanding followership (Uhl-Bien, 2011). Hence, it is intensely interested in the role of followers in leadership – how the followers contribute to forming and enabling leadership, and how leadership is conditioned

by who the followers are and what they think and do. Followers are no longer seen as objects subjected to leadership but as influential participants in performing the five leadership functions mentioned earlier. They take part in forming the "we," they contribute to defining problems and strategies, and they play an active part in mobilizing others for action and selling the results. In this relational approach to leadership power, both leaders and followers employ soft and hard power. They both come up with visions, ideas, arguments, and objections, and while leaders may be in a position to punish their followers, followers can employ different forms of resistance and ultimately exit the relationship. Seen from this relational perspective, leadership is a product of ongoing negotiations between leaders and followers in which all parties employ smart power.

A leader may come up with a vision for how to extend the access to sustainable energy production to all the households in a local community. The leader may support this vision with a strategy for bringing it about, and advance persuasive arguments and narratives that incentivize a group to accept or even to contribute, and sanction those who object. For their part, followers may bring insights and ideas to the table, voice criticisms, and use different tactics for avoiding and resisting compliance if their input is not taken into account. Ultimately, they can choose to exit the leadership relationship and look for other leaders to follow. Hence, a productive leadership relationship is one in which both leaders and followers adapt and innovate their positions. Fig. 13.1 illustrates this basic pattern of interaction between leaders and followers, which can be conceived as a relational balance between the use of hard and soft power.

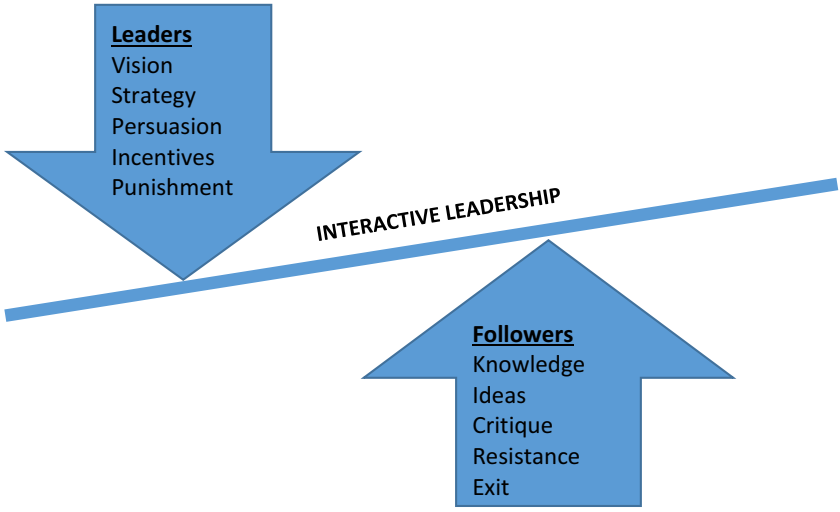

Fig. 13.1. Interactional Leadership Production.

Leadership of Cocreation

The interactive approach is highly relevant for coming to grips with the leadership of cocreation processes. This particular form of leadership departs from other leadership strategies in several crucial ways (Ansell & Torfing, 2021a, 2021b; Sørensen, Bryson, & Crosby, 2021). For starters, organizations tend to have clearly demarcated memberships, well-established purposes and goals, and clear divisions of labor. In contrast, cocreations are composed of actors from different organizations or communities whose common purposes and goals are emerging and whose internal division of labor is relatively fluid. Therefore, leaders of cocreation need to invest a lot of energy in creating a "we" among actors who do not at the outset have much sense of shared destiny and belonging, and to propose and negotiate a mission statement that is attractive and meaningful for the participants. They must also spend time and effort on recruiting actors who have something to contribute. Engaging a local community in fighting the spread of a nearby desert, they must repeatedly emphasize that they will all be affected in a bad way if nothing is done about it. Moreover, it is important to engage them in formulating a shared goal and in considering how different participants can contribute and how more actors can be mobilized.

Another difference between leadership of organizations and leadership of cocreations is that access to hard power tools tends to vary considerably. While organizations tend to have a formal and hierarchical leadership structure, the leadership of cocreation processes tends to be more horizontal and informal. In organizations, leaders have a specific leadership domain and a particular group of followers, which can include employees or members. If the followers are employees, leaders can hire and fire, promote and demote, or change the distribution of tasks to the advantage of some and the disadvantage of others. If the followers are members, leaders can formulate membership rules and distribute funding, and sometimes even exclude members from the organization. Leaders of cocreation processes are in a different position because they must exercise leadership without formal leadership authority over the participants who come from different groups and organizations. This creates a more horizontal pattern of interaction between the participants and between them and their leadership, thus necessitating the reliance on soft rather than hard power tools.

A final difference is that while leaders of organizations operate within their own leadership domain, leaders of cocreation are constantly trespassing into other organizational domains. The participants in a network or partnership will tend to have strong commitments to the leaders of their own organizations or communities. Engaging fishermen, those who transport fish, retail and fishery experts in innovating a more sustainable fishery may meet resistance from boat owners, business leaders, and leaders of knowledge institutes if participation is time consuming for their employees or produces ideas and strategies out of tune with their own agendas. Therefore, leaders of cocreation processes must take into account these dispersed organizational domains and secure support from their leaders.

Building Leadership Capacity to Promote Cocreation of the SDGs

As seen above, leadership of cocreation is a complicated and multifaceted activity. Hence, there is good reason to consider how it is possible to build the leadership capacity needed to employ cocreation as a tool for promoting the SDGs. Let us start by considering what kind of skills and competencies actors need to perform effective and legitimate leadership of cocreation (McCallum & O'Connell, 2009; Puccio, Mance, & Murdock, 2010). Such leadership is effective if leaders are able to meet their goals through the mobilization of others, while simultaneously helping those others to advance their objectives. Leadership is legitimate when leaders establish broad acceptance and support for what they do from the participants in the cocreation project as well as from the surrounding society. In the following, the focus will be on building capacity to lead by means of soft power. A short list of skills and competencies is found in Table 13.2.

Insights into SDGs: In local cocreation, it is easy to lose sight of the SDGs. Concrete local problems and issues can easily take over the agenda and lead to projects and activities that have very little to do with developing a more socially, economically, and environmentally sustainable local community. To avoid this fate, it is important for a leader to know the content of the SDGs and their targets and indicators well enough to be able to apply them in a way that is relevant to the local context and can guide concrete efforts to solve local problems and inspire visionary projects. If a cocreation process aims to build a school, a leader may not only guide participants toward the use of sustainable building materials or granting employees acceptable working conditions, but may also point out that the project has the potential to enhance gender equality by providing education to girls.

Knowledge of local community: Another important competence is knowledge of the local community and its inhabitants. Leaders who are ignorant of the people and groups who inhabit a local community, and who fail to appreciate the relationships between different actors, will have a hard time identifying relevant

Table 13.2. Skills and Competencies Important for Leaders of Cocreation.

- Insights into how the SDGs and their targets indicators are applicable to the local context
- Familiarity with the local community and its inhabitants
- Social capital in terms of trustful relationships and wide-ranging network connections
- Experience in communicating with diverse groups to foster motivation
- Ability to negotiate, mediate conflict, and facilitate discussions
- Perseverance to operate in a complex, uncertain, and unpredictable environment

and affected actors and motivating them to collaborate. There might be long-term conflicts between different groups that hinder collaboration, and there is a high risk of excluding or marginalizing people who possess resources or knowledge that are important for success.

Social capital: Another leadership competence is possessing trustful relationships with key actors that allow leaders to bond, bridge, and link different groups in the local community. Without trust or connections, a leader will be unable to recruit followers, because people will be less likely to listen to and engage with their ideas. For example, inviting consumers, food producers, and restaurants to a workshop to discuss how to reduce food waste will attract more participants if the host is well-known and well-liked and holds a reputation for being reliable and supportive rather than unreliable and judgmental, and it is easier to get old enemies on speaking terms if the person who brings them together is known as impartial, fair, and open-minded.

Communicative skills: The key to good communication with stakeholders is to clearly state what a diverse group of actors can achieve from working together and to clarify the relative contributions of each actor. The ability to translate between the perspectives of multiple participants and to align these perspectives with one or more SDGs is also a crucial communicative competence. Good listening and open minded, friendly and respectful communication can facilitate translation and alignment. Leaders should avoid dominating discussions to ensure that everyone has a chance to speak. Finally, leaders must be able to communicate enthusiasm and hope. For example, if a network of diverse actors tries to solve a traffic congestion problem to reduce CO2 emissions and encounters a major set-back when the city council rules against their proposed solution, leaders must swiftly communicate the existence of alternative and equally valuable and feasible strategies for goal achievement.

Conflict mediation: A key skill for leaders of cocreation is to master the craft of getting people to negotiate in a constructive manner and assist them in overcoming differences. For example, if there is disagreement regarding how to best protect a national park threatened by excessive tourism, as the Galapagos Islands faced a few years ago, it may be possible to get environmentalists and those working in the tourism industry to reach a compromise that allows for regulated tourism. To forge such a compromise, the leader must be able to propose solutions that reflect the concerns of all sides of the conflict while keeping the goals of sustainable life on land and below water in mind (Goals 14 and 15). Enabling compromise calls for skill in conflict mediation.

Perseverance: A final really important leadership aptitude is the perseverance to operate in the context of complexity and uncertainty. It is often not possible to plan a cocreation process. Things happen from one day to the next and it takes personal and professional robustness to move the process forward without knowing what is around the next corner. Complexity and uncertainty are both a product of unpredictable events within the cocreation process and constant changes in the external environment. Some participants may suddenly change their mind on a subject or even decide to leave the collaboration. The local government may make decisions that change the conditions for carrying out a

given project; a donor organization may cease, reduce, or redirect funding; and ethnic or political conflicts may erupt and jeopardize the project. It takes perseverance to stay on course and overcome obstacles.

Who Takes the Lead?

The sheer magnitude of the required leadership capacities is likely to scare people from the both challenging and rewarding task of leading cocreation. This reaction is due in part to the common assumption that leadership is an individual responsibility of omnipotent and multiskilled superheroes. In reality, leadership is often shared among a number of ordinary but motivated people. Moreover, there is a tendency to assume that leaders are formally appointed, though in fact, leadership may simply be exercised by informal leaders who happen to be part of the process and are willing to undertake some basic leadership tasks. Recognizing that leadership is a multiactor endeavor performed by unappointed leaders may make engagement in leadership less scary and overwhelming. It is something that everybody can do and support each other in doing.

Recent strands of leadership theory point out that the distributed character of leadership is not simply a reality but also a good thing because it tends to make leadership more effective and legitimate ('t Hart, Kane, & Patapan, 2009; Spillane, 2012). These benefits are more easily achieved if those who are involved in leadership do not compete but join forces and coordinate and align their goals and strategies (de Bruin & Tukker, 2013; Morgeson, DeRue, & Karam, 2010). Acting as a team, distributed leaders can draw on a wider range of skills and competencies. However, if one leader focuses on achieving the SDGs while another is more interested in promoting local solutions, their competing objectives might end up creating confusion. It takes teamwork among leaders to make sure that the distributed leaders speak with one voice, for example, by finding ways of demonstrating that local solutions are connected to the SDGs.

Forming leadership teams is also paramount for building leadership legitimacy. Leaders need acceptance and support from the participants in cocreation processes as well as from other relevant and affected actors in society. If those people who are central to the cocreation process take on leadership roles, it will increase the chances that other actors in the network will listen to them and commit to their ideas. Likewise, if actors who are highly esteemed by the local community are involved in leading a cocreation project, their involvement will help to achieve general support and acceptance from key societal actors. A project can go a long way on the shoulders of a group of well-respected community leaders who vouch for it and champion it.

What do these insights imply for changemakers? The important implication here is that changemakers do not have to carry the full leadership load by themselves. In some situations, they may take a back seat while allowing others to take the major burden of leadership. Changemakers should perceive cocreation leadership as a team effort, recognizing their own limitations as leaders, and rely on others when they can bring specialized skills to bear in the cocreation process.

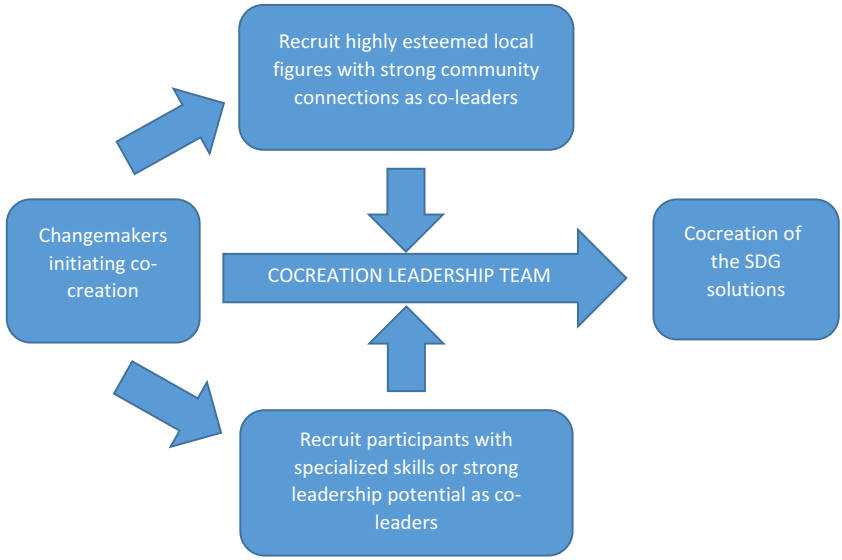

Fig. 13.2. Building and Leadership Capacity.

Important selection criteria for recruiting the leadership team are that participants should be well acquainted with the local community and have contact to relevant community actors. Another criterion is the possession of strong communicative skills that can help to create both internal cohesion and external support for the cocreation process. Since team-based leadership of cocreation may not be familiar to many participants, recruitment may also call for some degree of mentoring and leadership training.

In sum, team-based leadership of cocreation processes is a collaborative endeavor. As illustrated by Fig. 13.2, those who initiate cocreation should both recruit well-respected and well-connected figures from the local community and participants with specialized skills or competencies to serve as part of the cocreation leadership team.

Conclusion

In this chapter, we have argued that leadership plays an important role in promoting successful cocreation. Leadership is important for creating a sense of shared destiny and purpose; diagnosing pressing problems and future aspirations calling for collective action; communicating potential solutions and building support; mobilizing resources for implementation and framing stressing results to spur self-confidence and further action. We have also pointed out that leadership of cocreation differs from other forms of leadership in that it tends to rely mainly on soft rather than hard power. This reliance stresses the need for skills and competencies that enable leaders to connect and communicate with the

Table 13.3. Recommendations for Cocreation Leadership.

Changemakers may benefit from:
• Paying attention to achieving the SDGs as well as to the needs and aspirations of the local community and actors involved in the cocreation
• Deciding how much time and energy needs to be invested in each of the five leadership functions and how they must be performed
• Employing all available soft power tools to enhance collaboration and drive the process to conclusion
• Encouraging others to take part in leading the cocreation, particularly those who possess skills and competences that the changemakers do not have or that have strong connections and enjoy respect in the community
• Mentoring and training actors with leadership potential
• Building reflexive leadership teams that can both share leadership tasks and speak with one voice

participants in a given network or partnership as well as beyond. Leadership of cocreation is a demanding task that will often gain in impact and reputation by involving several actors in a leadership team. We suggest that changemakers seek inspiration in the following recommendations listed in Table 13.3.

Chapter 14

Challenges to the Cocreation of the SDGs and the Way Forward

Abstract

This concluding chapter summarizes the critical insights that changemakers ought to consider in their attempt to lead and manage cocreation processes and enhance their impact. The chapter also addresses three crucial challenges to the advent of a sustainable future: the need to rethink the assumptions of mainstream economics, the need to secure political stability in times of rapid societal change; and the demand for the deepening democracy. Finally, the chapter argues that local efforts to build a sustainable future will only succeed if key economic, political, and democratic challenges are effectively dealt with at the global and national levels.

Keywords: Sustainable futures; mainstream economics; doughnut economy; political stability; deepening democracy; local-global interaction

Local Cocreation Is Central to Achieving the UN's SDGs

The SDGs are a true gift to the world. For the first time, the world has a unified agenda and a common language to talk about global problems that need to be addressed and the global ambitions that call for collective action. There might be both synergies and trade-offs between the SDGs, but they have set a clear direction for changemakers around the world.

Confronted with the daunting task of achieving the ambitious goals that UN member-states have set for the world, we might all feel a little alone, small, and intimidated vis-à-vis this grand enterprise. Indeed, we might doubt that we will ever be capable of creating the conditions for sustainable living on the planet earth. We argue that there is no reason to feel overwhelmed or doubt our capacity to achieve the SDGs since the power and wisdom of the many come to our rescue. All over the world, there are scores of local actors – politicians, public employees,

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private firms, NGOs, philanthropists, trade-unions, and dedicated citizens – ready to pursue one or more SDGs and ready to build alliances and collaborate with other competent, knowledgeable, and motivated actors and to involve those people who are affected by the problems in question and will enjoy the benefits accruing from new and better solutions. Small and seemingly insignificant initiatives may provide the spark that sets the world on fire and drives change. The shining example is the individual school-strike of a young Swedish girl that mobilized hundreds of thousands of young people, reinvigorated the climate movement, and forced the EU and many European governments to launch more ambitious climate plans. Less spectacular efforts can also do the trick and fortunately there are many changemakers who bring relevant and affected actors together and catalyze change.

In line with Goal 17, we propose that cocreation of SDG solutions in and through purpose-built networks and partnerships will allow us to tap into the resources of manifold actors from the public sector, the economic realm, and civil society and thereby invoke the collective wisdom and intelligence of the crowd. Cocreation brings together interdependent actors in problem-focused collaboration, in which differences are constructively managed in ways that stimulate mutual learning and innovation and build common ownership over joint solutions. The combination of resource mobilization, innovation, and democratic ownership is a potent cocktail that will help us reach the SDGs.

Reaping the fruits of local cocreation projects requires systematic reflection about each of the steps in the process, from translating the global SDGs to the national and local context, via the construction of platforms and arenas and securing funding, to evaluating achievements and ensuring accountability for new solutions. This book has sought to stimulate, inform, and guide the reflections of local changemakers in order to make the most of their efforts to cocreate innovative SDG solutions. The huge variation in context does not allow us to provide a fixed recipe for how to make local cocreation projects successful in achieving one or more SDGs. However, the chapters have each provided some insights that local changemakers ought to consider in order to lead and manage cocreation projects and enhance their impact.

The *first insight* is that cocreation can be a vehicle for translating generic global and national sustainability goals to the local context, thereby making these goals concrete and relevant to local actors. Furthermore, as a strategy of translation, cocreation helps to harness the energy, enthusiasm, and capacity of local actors and motivates their efforts to achieve sustainability.

The *second insight* is that the formation of platforms can help to attract participants and make it easier for them to collaborate. Platforms can also enhance synergies between the different resources, skills, and perspectives that actors bring to the table, amplify the impact of their joint investments, help to scale up successful solutions, and foster social learning that spurs innovation.

The *third insight* is that stakeholder analysis is a crucial tool for bringing together relevant and affect actors in local cocreation, but should be combined with efforts to clarify the interdependencies between the participants and to

empower weak, vulnerable, and inexperienced actors so that they can participate on an equal footing with other actors.

The *fourth insight* is that problem diagnoses that stress the urgent need for change combined with ambitious and visionary goals and the involvement of resourceful actors with fresh ideas can stimulate the development of the innovative solutions needed to achieve the SDGs. Leaders of cocreation must act as conveners, facilitators, and catalysts to bring out the innovative potential of cocreation.

The *fifth insight* is that cocreation processes can use experimentation and design thinking to further their innovation agenda. Cocreated prototypes of SDG solutions is particularly valuable for involving local actors in bottom-up dialogue, providing fast learning, and building support and diffusing innovation.

The *sixth insight* is that there are various ways of funding the cocreation of prototypes of new SDG solutions and that blended-financing offers an important way of covering the costs of realizing innovation. The legitimacy of funding and financing cocreation of SDG solutions depends on clear oversight and fiscal auditing.

The *seventh insight* is that blueprint strategies based on the assumption that one-size-fits-all are ill equipped to address local sustainability challenges, while more adaptive strategies that aim to respond dynamically to changing circumstances on the ground can help to overcome different implementation traps.

The *eighth insight* is that the emergent character of cocreation reduces the relevance of the classical forms of formative and summative evaluation and invites the usage of developmental evaluation that encourages the participants in cocreation processes to engage in real-time reflections about problems, solutions, and impacts.

The *ninth insight* is that efforts to ensure the accountability of cocreation networks and partnership is important for securing support from sponsors, relevant stakeholders, affected citizens, and the general public. With cocreation, formal accountability mechanisms are often limited and need to be supplemented with social and more informal accountability mechanisms.

The *final insight* is that leadership is crucial for cocreation success, but is often more horizontal, distributional, and relational than the top-down leadership practices found in hierarchical organizations, and it needs to balance directional leadership with bottom-up input. The formation of leadership teams depends on recruitment of leaders with strong local connections and specialized skills.

Well-designed local cocreation processes are central to achieving the SDGs, especially if the myriad of local projects support each other and create synergies and, when they work and produce desirable results, they are scaled up to regional and national levels. That being said, we should not forget that local action is conditioned by regional, national, and global structures, regulation, and governance. Local cocreation projects are dependent on political support, legal frameworks, funding and financing, and expert knowledge that are often provided, or not provided, from above. Hence, local cocreators must enmesh themselves in the tangled web of multilevel governance, draw on the political and economic resources, regulatory frameworks, and forms of governance that enable

change, and try to mitigate or overcome the barriers imposed by the regional, national, and global conditions for local action.

Having briefly recapitulated the main thrust of the argument advanced in this book, the remainder of this concluding chapter will address three crucial challenges to the creation of a sustainable future and seek to identify some prospective solutions.

Toward a New Economic Thinking That Recognizes the Natural Limits to Growth?

This section considers the economic challenge to a sustainable future. The creation of global sustainability requires a new economic thinking that is not merely driven by the ambition of enhancing economic growth, but incorporates the natural limits to growth and the need to protect natural and human environments. Making progress toward the achievement of the SDGs will in many cases require and stimulate economic growth and thus contribute to the depletion of natural resources. Hence, to avoid increasing the pressure on the natural and planetary conditions for human existence in the effort to achieve the SDGs, we need a new economic theory that has room for ethical concerns and puts a premium on sustainable growth based on a circular economy. We shall briefly look at some recent attempts to renew micro- and macroeconomics that heed the call for new economic theories that support the transition to sustainability.

The recognition that the earth's resources cannot support the present rates of economic and population growth is by no means new. The *Limits to Growth* report (Meadows, Meadows, Randers, & Behrens, 1972), commissioned by the Club of Rome, was published some 50 years ago. It generated a huge discussion, including criticisms of the failure to take into account technological innovations, and paved the way for the idea of "sustainable development" that was famously introduced and broadcasted by the 1987 Brundtland report and aimed to combine the wish for continued economic growth that enables redistribution of wealth and eradication of extreme poverty and the demand for a sustainable human-ecosystem equilibrium that secures resources for future generations. The concept of sustainable development has been criticized for its attempt to marry opposites, but it can also be seen as lever for renewing the way that we think about and organize the global economy. Hence, it seems clear that there can be no sustainable living if unfettered economic growth based on the current model of industrial production continues. This conclusion is stressed by the recent Human Development Report 2020 (UN, 2020b) that recommends a decoupling of economic growth from emissions and material use and refocuses growth on human well-being and equal opportunities for human growth.

So-called heterodox economists have long problematized the assumptions of mainstream economics and provided alternative models and policy recommendations (Jacobs & Mazzucato, 2016). Heterodox economics is a mixed bag of theories characterized by pluralism at the level of methods and basic assumptions and a general ambition to take a more holistic perspective on economic dynamics

rather than merely focusing on aggregate productivity and economic growth (Kvangraven & Alves, 2019). Hence, some economists argue that economics should pay more attention to the distribution of economic surplus and not only measure productive outcomes, and also have more focus on equality, well-being, dignity, health, and political rights. Others argue that economics should focus more on the power relations that shape economic decisions and the norms and ethics that inform these decisions (Rodrik, 2020).

An important and well-cited paper by Bowles and Carlin (2019) offers an interesting new perspective on how to understand microeconomic processes. The paper seeks to "outline a framework for a well-functioning economy under contemporary conditions consonant with values summarized by a broad concept of freedom that goes considerably beyond a fair distribution of rising living standards, and is better able to support a more just, democratic and sustainable society" (Bowles & Carlin, 2019, p. 1).

The paper begins by asserting that all modern economic policy paradigms – classical liberalism, Keynesianism, and neoliberalism – combine a set of ethical values with a model of how the economy works. Neoliberalism builds on a normative framework of negative freedom and procedural justice that supports economic transactions taking place in free markets with no or limited government interference. In the neoliberal market equilibrium model, every economic actor can exit his or her current relationship at zero costs (Bowles & Carlin, 2019, p. 3). In this completely individual and voluntary exchange process, there is no need for power and coercion and thus no room for ethical judgment. Indeed, the space for public values is eliminated.

A new microeconomics will bring back power and ethical concerns into economic transactions, for instance, by insisting that contracts between economic agents are always incomplete and thus rely on negotiation, bargains and, ultimately, the exercise of power. Following this line of thinking, the private firm, together with other institutional forms of exchange, emerges as politicized structures where principals and agents fight over outcomes. Since political power struggles often hurt both parties, social and ethical norms may be helpful in creating a situation in which both principals and agents would be better off and no one affected would be worse off. This is evidenced by the positive experiences with corporatist negotiation in Scandinavia and by the growing worldwide embrace of Corporate Social Responsibility. While these ideas are intended to challenge the hegemony of neoliberalism, they have a long tradition in institutional economics (Commons, 1931; Veblen, 1973).

The recognition that social norms are essential to the operation of market economies prompts a debate about the cultivation of ethical concerns about distributive justice, sustainability, and social accountability. A new economic policy paradigm based on this insight will not be located along the government-market continuum that connects planned economy with an unfettered free market economy. Rather, it will be located within the triangular space connecting government, markets, and civil society (see Fig. 14.1 below). For as Bowles and Carlin conclude: "Exploring the non-government non-market dimensions of our institutional and policy options provides the basis for

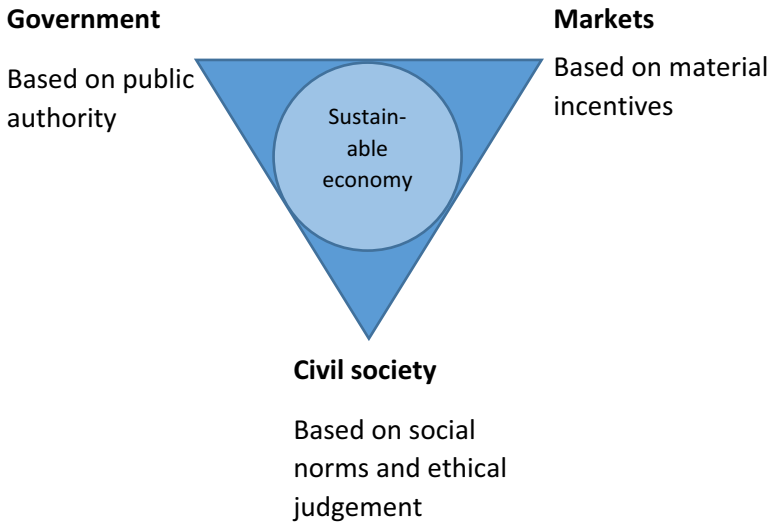

Fig. 14.1. The Triangular Space Circumscribing a New Sustainable Economics. *Source*: Adapted from Bowles and Carlin (2019).

integrating a set of democratic, egalitarian, and sustainability values with an economic model consonant with today's economy" (2019, p. 9). Hence, we will have to constantly weigh economic concerns, government preferences, and civil society norms against each other in order to create a sustainable future. That is why a sustainable economy is not found in the corners of the triangle in Fig. 14.1, but in the circle circumscribed by the triangle.

Kate Raworth's famous "donut economics" (Raworth, 2017) provides us with a new macroeconomic perspective that, like Bowles and Carlin, recommends that we move from a self-contained to an embedded market economy. Raworth starts off by asking an intriguing question: what if we started economics, not with the established theories, but with the ambition of meeting the needs of all within the means of the planet. The challenge would then be "to create economies – local to global – that ensure no one falls short on life's essentials – from food and housing to healthcare and political voice – while safeguarding Earth's life-giving systems, from a stable climate and fertile soils to healthy oceans and a protective ozone layer" (Raworth, 2017, p. 8).

Environmental issues are largely neglected in mainstream neoclassical economics. Environmental degradation is described as an externality caused by market failure, a clean environment is portrayed as a luxury product, and pollution is something that would be paid for by further growth. It is time to turn the tables and abandon the goal of blind and senseless growth in GDP and start by asking how we can shape the economy so that it promotes social equality and sustainable development. To that end, Raworth claims, economic policy-makers

need a new compass that clearly envisages the social and planetary boundaries that our economies must respect, and that is conveyed by the image of the doughnut. The hole in the middle reveals the risk that people worldwide are falling short on life's essentials, such as food and water, education, healthcare, housing, and the other social priorities captured by the SDGs (shortfall). Beyond the Doughnut's outer ring, however, humanity risks putting too much pressure on Earth's critical life-supporting systems, thus causing climate breakdown, habitat destruction, extreme biodiversity loss etc. (overshoot). Between these two sets of boundaries – the social and the planetary – lies a possible safe and just future for humanity that needs to be supported by a circular economy, sustainable energy production, social redistribution, accountable partnerships with the state, the creativity of the crowd, the contribution of households, and growth in human rights and potential. The doughnut model is shown in Fig. 14.2.

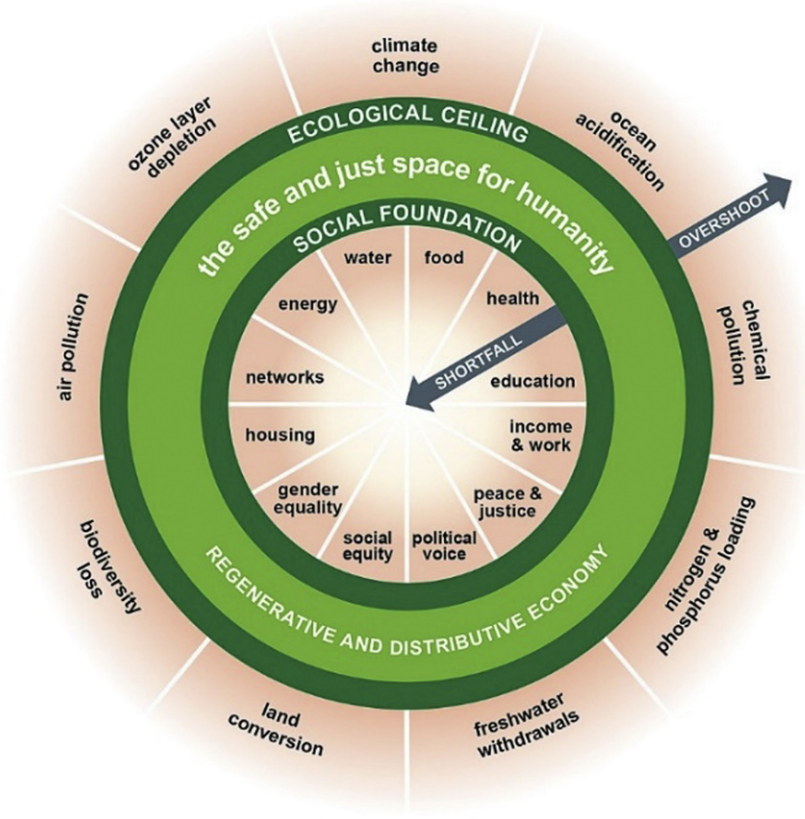

Fig. 14.2. The Doughnut Model.

Although this framework has been criticized for not integrating the criteria for ecological safety and social justice (Rockström et al., 2021), doughnut economics is helpful in defining the safe and just space for humanity that a regenerative and distributive economy must strive to create and maintain but is less precise when it comes to theoretical content and practical policy recommendations. On the theoretical side, it encourages economic thinkers to replace the rational economic man model with a new model of social and adaptable humans, to analyze the joint contribution of embedded markets, accountable government, private households, and civic organizations, and to abandon mechanical equilibrium models in favor of dynamic complexity models. On the practical policy side, we are wisely warned against believing that one size fits all. Given the speed and scale of the change needed and the diversity of contexts, it is impossible to prescribe the policies and institutions that will be needed in the future. This leads Raworth to see social experimentation as a way ahead, thus leaving us with the challenge of how to scale up successful experiments that help to stay above the social foundation and below the ecological ceiling.

Experimentation with economic policy and governance will look different in different fields. For instance, new research on water management pinpoints the limits of conventional economic policy recommendations based on privatization, pricing, and property rights and shows that the SDG for water requires institutional and technological innovations to supply, allocate, and manage water, as well as political and financial commitment to help those who otherwise might be left behind (Garrick, Hanemann, & Hepburn, 2020). Experimentation with economic policy and institutions is gaining increasing prominence (Bardsley et al., 2020) and may help to fit new environmental and agricultural governance solutions to different contexts (Higgins, Hellerstein, Wallander, & Lynch, 2017; Noussair & van Soest, 2014).

Securing Political Stability in Times of Rapid Societal Change

This section reflects on the political challenge associated with the transition to a sustainable future. The problem is that both global problems and efforts to solve them will tend to foster disruptive change and heightened turbulence. Climate change will enhance extreme weather conditions and cause drought, flooding, and rising sea-levels that in turn will disrupt agricultural production and lead to hunger and an increasing number of refugees. Scarcity of clean water will give rise to armed conflicts and the persistent degradation of natural environments will have a negative impact on the livelihood of tribal communities, small holders, and fishermen. Attempts to solve these problems and improve the conditions for sustainable living may help to mitigate conflicts and generate support for government, but in some areas the transformation process itself may be a source of conflict and upheaval. Hence, the transformation from a global economy based on fossil fuels to a world based on renewable energy will create winners and losers and if the latter are not compensated then conflicts and protest will arise. Coal miners will strike, consumers hit by carbon taxes will protest, and those regions

that have prospered from fossil fuel production will suffer from economic decline and hold national governments to account for their misfortune. The protests by the so-called "yellow vest" movement in France is a case in point. A modern political leader, President Macron, had seen the light and wanted to reduce CO_2 emissions by introducing fuel taxes that placed a heavy burden on the working class and the lower middle class, especially in rural and semirural areas. In November 2018, more than 300,000 protesters gathered in big demonstrations all around France and in the coming months, there were many similar demonstrations and some of these developed into violent clashes between protesters and police. In many parts of the world, there have been large-scale protests against new hydropower plants that provide a source of renewable energy, but may have devastating consequences for natural habitats and lead to displacement of local residents. Hence, in Austria, Georgia, and the Balkan countries, there have been massive protests and in North Sumatra indigenous people staged a protest against a planned 510-megawatt hydroelectric dam, which threatens to evict them from their ancestral land and damage the ecosystem of the Batang Toru forest, home to critically endangered Sumatran tigers and orangutans.

Without political intermediation and dialogue, rapid societal change – whether driven by global problems or new sustainable governance solutions – may be a source of political protest and conflict that will threaten political stability. Hence, governments around the world and at different levels are facing a dilemma: if they fail to solve the pressing problems our planet are currently facing, their population might suffer and stage large-scale protests, and if they embark on large-scale reforms that lead to disruptive change without compensating losers, the reforms might spark conflicts and destabilizing resistance.

Political tensions may not only result from pressing societal problems and the transformations necessary to solve them. Involving relevant and affected actors from the economic sector, civil society, and local neighborhoods in addressing global problems, designing solutions, and achieving one or more SDGs may empower the participants and generate an appetite for more popular participation and political influence that neither liberal representative democracies nor more autocratic governments will be prepared to accept. If governments accept the growing demands for enhanced participation, it might undermine the stable rule of the governing elite. On the other hand, if they reject the demands, which tend to be fueled by educational reform and growing affluence, it may trigger protests, conflicts and political struggles that undermine government power. Hence, governments are facing another dilemma, since both expanding and limiting participation may lead to political tension.

The dilemmas facing governments during the transition to a sustainable future beg the question of whether the governments should fear or oppose sustainability reforms and whether they will prevent enhanced participation out of concern for maintaining political stability. In short: will societal disruption necessarily cause political instability? Much depends on how we conceptualize political stability. Political stability is often associated with the absence of violence, the longevity of government, and the absence of structural change (Hurwitz, 1973). However, the incidence of violent protests is not in itself a source of instability since a stable

political system may be able to cope well with such protests. The demand for longevity or durability of government also misses the point since stable democracies are predicated on regular overturn of the incumbent government and the formation of new governments. Finally, structural change at the level of legal rules and policies may provide a source of constitutional and systemic stability. In sum, change is not necessarily antithetical to political stability. We can have political stability even if some elements change as long as other elements embodying the constitutive characteristics of the system continue and allow us to conclude that the system has survived (Thrasher & Vallier, 2018).

In line with this argument, Dowding and Kimber (1983, p. 239) long ago defined political stability as the capacity of a political system or regime to prevent contingencies that might force its nonsurvival, i.e. forcing it to give up one or more of its constitutive characteristics. Defined in this way, political stability is unlikely to be threatened by the cocreation of a sustainable future through more or less disruptive reforms and initiatives. Hence, most systems or regimes will be able to change their policies, regulations, and even their forms of governance without seriously compromising the key characteristics that define them. However, some political systems or regimes will stubbornly insist on not changing anything and as a result they are less likely to survive. Challenges, tensions, and pressures will continue to build up and initially lead to increased repression and finally to system breakdown and regime collapse, thus leaving us with no or limited governance capacity and civic insecurity until a new system or regime is created.

The stability of a political system or regime depends on its robustness, i.e. its ability to produce flexible, adaptive, and innovative responses to environmental, social, and political challenges in order to uphold their key agendas, functions, and values (Anderies & Janssen, 2013; Ansell, Sørensen, & Torfing, 2020; Howlett, Capano, & Ramesh, 2018). Building robust political systems calls for open-ended debates about problems and solutions that facilitate innovation and experimentation; horizontal political alignment aiming to align the ideas and visions of key political actors into public governance initiatives; vertical ownership over new policy initiatives in order to secure implementation and optimize impact; procedures for ensuring equity across countries, social groups, and generations; and commitment to compensate those actors who incur short-term losses from change.

In a globalized world, national political systems are interdependent. Therefore, robustness may also derive from transnational partnerships between developed and developing countries that may facilitate exploration and exploitation of new solutions through transfer of technology, expertise, and money, joint dialogue about local needs and new opportunities, and respect for the particularity of the system that receives external support.

Local Cocreation and the Demand for Deepening Democracy

This section deals with the democratic challenge associated with the struggle for a sustainable future for humankind. We briefly touched on the topic of democracy in the last section when noting that participation in cocreation of SDG solutions may empower the participants and generate further demand for democratic influence. We shall now further explore the democratizing impact of cocreation.

Let us first make it perfectly clear that the primary reason for striving to cocreate public solutions to pressing problems is not that it enhances democracy. Cocreation is first and foremost used as a strategy for solving complex problems because it is an efficient and effective tool for creative problem-solving. Cocreation harnesses valuable experiences, insights, and ideas and leverages necessary resources. Relevant and affected actors all tend to make their different contributions to defining and understanding the problem at hand and their sustained interaction tends to stimulate learning and innovation and to build common ownership for new solutions. While hierarchical government uses authority and expertise to drive swift problem-solving, it often fails to take local needs and forms of knowledge into account and to mobilize the resources of private actors such as business firms, civil society organizations, and citizens. Market-based governance tends to be more inclusive than public hierarchies as it involves private contractors who are competing with each other in the production of new and path-breaking solutions that will eventually receive public funding. However, competition often ends in bitter rivalry that prevents knowledge sharing and pooling of resources to maximize impact. By contrast, cocreation invites a broad range of actors to collaborate in defining problems and designing and implementing solutions. Collaboration may be difficult in contested areas where views and interests differ, but the actors' recognition of their mutual dependency on each other's resources and the availability of well-designed arenas and adequate leadership tend to facilitate alignment, agreement, and coordinated action.

While collaboration takes time and is sometimes troublesome, cocreation is efficient because it mobilizes resources that would not otherwise be mobilized in public governance. Likewise, it is effective because it stimulates the production of innovative solutions that outperform existing solutions. However, cocreation also has a noteworthy positive side-effect as it contributes to the democratization of public governance. Democracy is a particular form of governing and way of life that gives citizens a free and equal opportunity to participate in public debate and effectively influence decisions that affect their lives. Civil and political rights, such as freedom of speech, the right to organize, universal suffrage etc., provide an important precondition for democracy that in modern mass societies often involves constitutionally guaranteed procedures for participation in free and fair elections that allow citizens to elect political representatives who will govern on their behalf until next election when their candidacy will be on the line. Liberal representative democracy is far from ubiquitous, and is currently under pressure from political attempts to curb the rights to free and equal participation. Hence, representative democracy may also take illiberal forms where a particular party, clan, or cadre claims to incarnate the will of the people and forms a representative

government that governs on behalf of the people, although in an unresponsive way and with limited opposition (Zakaria, 2007).

Whatever its form, representative democracy suffers from three weaknesses that stem from the limits to popular participation (Sørensen & Torfing, 2019). The first weakness is that by excluding large segments of the population from the actual decision-making process that only involves elected representatives and government officials, it turns citizens into passive spectators. The educational revolution and the growing aspirations of the middle class tend to enhance the competence and assertiveness of a growing number of citizens who are increasingly dissatisfied with the passive spectator role and want to have a more active and direct involvement in making decisions that affect their lives (Dalton & Welzel, 2014).

The second weakness is that representative democracy lacks an efficient mechanism for transmitting relevant information, experiences, views, and ideas to the political decision-makers in the solution phase and mobilizing relevant societal resources in the implementation phase. Interestingly, new research shows that elected government officials increasingly solicit relevant information, opinions, and ideas from the population and societal actors so that they can better understand the problems they are trying to solve and devise solutions that are tailored to the local context and draw upon local resources in the implementation phase (Hendriks & Lees-Marshment, 2019). For many years, citizen participation was mainly portrayed as a *supply channel* that enabled citizens to voice their opinions between elections. New perspectives on citizen participation stress the public decision-makers' *demand for input*.

The third weakness is that the combination of elite competition and technocracy in representative democracy tends to create a distance between the executive decision-makers and the people, which makes it difficult to create broad-based popular support for government initiatives and thus hampers implementation of new policy initiatives. Even well-intended and well-designed legislation may appear as dictates by people on the ground who have not been involved in the decision-making process either because they are deemed unqualified to participate or because the elected government believes that societal interference in policy making is illegitimate.

The weaknesses inherent to representative democracy have prompted widespread democratic experimentation and innovation (Sabel, 2012; Saward, 2003; Smith, 2009, 2019). Much of this democratic experimentalism seeks to enhance citizen participation through staging of townhall meetings and public consultation processes in relation to local planning; establishment of participatory boards with user representation in public service institutions; formation of online or in-person citizen panels responding to policy proposals; experimentation with participatory budgeting; and the introduction of some form of workplace or classroom democracy. Although there are also examples of increased use of referendums that allow citizens to vote for or against government proposals, most of the new participatory experiments aim to enhance the participation of local stakeholders in deliberation defined as "a thoughtful, open, and accessible discussion about information, views, experiences, and ideas during which people seek to make a

decision or judgment based on facts, data, values, emotions and other less technical considerations" (Nabatchi & Leighninger, 2015, p. 14).

Worldwide there has been an increase in the use of minipublics and citizen juries that bring together a group of randomly chosen citizens to deliberate on a specific issue, whether it is the definition of specific problem or the choice of a particular policy solution. Over a number of days, participants are exposed to information and a wide range of views from witnesses, who are selected based on their expertise or because they represent affected interests. With trained moderators ensuring fair proceedings, the participants are given the opportunity to ask questions and request additional information. Following a process of deliberation among themselves, the jurors produce a decision or recommendation in the form of a citizens' report. Typically, the sponsoring public agency is required to respond, either by acting on the report or explaining why it disagrees with it and will not follow the decision or recommendation (Smith & Wales, 1999, p. 296).

In much the same way as deliberative minipublics and citizen juries, cocreation seeks to involve a group of citizens and lay actors in deliberation about public problems and solutions. Different experiences, views, and opinions are brought to the table, competing interpretations of problems and solutions are debated, and agreement is forged based on a widespread readiness to listen to each other's arguments, revise one's own opinion as a result of learning, and concede to what appears to be a better argument. However, as indicated in Table 14.1, there are three important points where cocreation as a participatory arena diverges from and complements deliberative minipublics and citizen juries.

First, the participants in cocreation are not randomly selected and are not seen to be representative of the general public. Rather, they are selected because they are affected by the problem and the emerging solution, or possess relevant knowledge, expertise, resources, or authority. This selection principle is important because it motivates the participants to be relatively intensely engaged in creative problem-solving over a certain period of time.

Second, in terms of representation, cocreation tends to mix citizens and private stakeholders with elected officials, public administrators, and representatives from

Table 14.1. Comparing Deliberative MiniPublics and Citizen Juries With Cocreation.

	Deliberative Minipublics and Citizen Juries	**Cocreation as a Participatory Arena**
Selection	Random selection	Purposive selection
Representation	Citizens deliberate amongst themselves	Citizens deliberate with a broad range of public and private actors
Mode of action	Talk-centric	Talk- and action-centric

international donor organizations. The citizens are not supposed to merely deliberate amongst themselves but will often engage in discussions with elected politicians, civil servants, and donors who possess valuable resources that are necessary for cocreating solutions and can help ensure that the most successful ones are upscaled. This composition of actors is important since it might enhance the uptake of new policy proposals and public solutions. Research shows that the policy recommendations from deliberative minipublics and citizen juries are often discarded by public authorities because they have not been a part of the discussion and have no ownership over the proposed solution (Hendriks, 2016), whereas cocreation arenas, where politicians and civil servants are involved in discussions with engaged citizens, tend to produce a much higher policy uptake (Sørensen & Torfing, 2019).

Finally, although cocreation involves deliberation, it goes beyond a "talk-centric" view of democracy to emphasize the active role of citizens and lay actors in creative problem-solving and public innovation. Cocreation arenas are not merely providing an arena for joint deliberation, but also for joint action based on the design and testing of prototypes, coordinated implementation, and collaborative adaptation. Hence, cocreation is not only about talking, but equally about acting to produce much needed change. The combination of talk and action is important because whereas deliberation may favor the more educated and resourceful actors, the engagement in transformative action may involve other groups with complementary skills. That being said, we should note that talk and action tend to shade into each other as we can act by means of talking and talk by performing certain actions. So what we are arguing is really that cocreation tends to emphasize practical engagement in transformative actions to a much higher extent than traditional forms of deliberative democracy.

In sum, cocreation can be seen as a variant of participatory and deliberative democracy that emphasizes the need for engaged participation of relevant and affected actors, including public decision-makers, in creative problem-solving that combines discussion and practical interventions. Although more than often than not, cocreation involves citizens, lay actors, and public decision-makers in joint discussions and concerted action, there is a risk that the proliferation of cocreation projects at the local level is not sufficiently linked with the established forms of representative democracy, thus giving rise to a bifurcated democracy in which central, regional, and local government decisions based on representative democracy are out of sync with the myriad of local cocreation projects based on direct participation, deliberation, and joint action. As indicated in Fig. 14.3, this problem can be solved either through a combination of co-creation arenas with metagovernance or through the development of new forms of hybrid democracy.

Metagovernance involves attempts to steer distributed problem-solving without trying to dictate solutions and forms of cooperation (Torfing, Peters, Pierre, & Sørensen, 2012). Central, regional, and local government can metagovern local cocreation arenas by designing collaborative platforms that provide templates and offer resources for collaborative interaction and by framing this interaction through the formation of goals, values, and storylines. Metagovernance may also involve some form of process management, for example, by

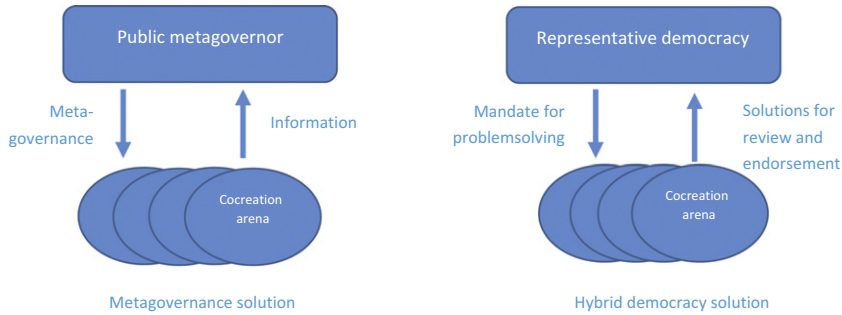

Fig. 14.3. Linking Cocreation Arenas With Elected Government Through Metagovernance or Hybrid Democracy.

encouraging reporting and assessment of results, praising good achievements, and offering counseling and advice when obstacles are encountered. Metagovernance is a crucial tool of governance that governments can use to reap the fruits of local distributed interaction involving manifold public and private actors while still playing a crucial role as agenda setter, direction giver, resource provider, and facilitator. Metagovernance both helps to provide "democratic anchorage" of networked cocreation in democratically elected government (Sørensen & Torfing, 2005) and to maintain a holistic perspective on public governance and value production, thus mitigating the risk of fragmentation and network egotism, i.e., the attempt of cocreation networks and partnerships to merely advance their own interests, perhaps even at the expense of other equally worthy courses of action. It goes without saying that metagovernance works best when there is a persistent flow of information from the local actors and cocreation arenas to the metagovernors. A good overview of local activities helps to tailor meta-governance to the actual needs.

In our interpretation, hybrid democracy has nothing in common with illiberal democracy, but is a positive and constructive attempt to combine participatory and deliberative forms of cocreational democracy with representative forms of democracy and the responsible exercise of executive power. This can, for example, be done by sequencing democratic actions: first, elected government sets the agenda, creates collaborative platforms, and mandates the formation of cocreation arenas; then cocreation arenas involve public and private actors, including civil society organizations, citizens, and neighborhoods, in creative problem-solving in relation to one or more SDGs; finally, elected government discusses, amends, and endorses the cocreated solution and invests in its realization. In Denmark, Gentofte Municipality has developed such a sequenced model of hybrid democracy and evaluations show that it strengthens political leadership, civic participation, innovation, and democratic legitimacy (Sørensen & Torfing, 2019). This model of hybrid democracy has now spread to other municipalities and countries.

Both metagovernance and hybrid democracy presuppose that there is a well-functioning and democratically elected government that can prompt problem-focused action, facilitate, and support coordination and ensure top-down accountability. In those parts of the world where such forms of government are not in place, there are other ways of supporting bottom-up cocreation of SDG solutions and ensuring coordination and accountability. One option is to rely on international donor organizations and UN agencies who may work with national, regional, and local government institutions to frame and channel a variety of cocreation projects. Another option is to form cross-cutting networks of local cocreation projects that can support each other, coordinate their activities, and share best practices.

From Global to Local and Back Again

This concluding section argues that while the global SDGs lead to a new focus on local cocreation in networks and partnerships, the local efforts to build a sustainable future will only succeed if key economic, political, and democratic challenges are dealt with at the global and national level. Hence, local action must be supplemented and supported by global, international, and national efforts to improve the economic, political, and democratic conditions for cocreation at the local level.

The unanimous UN support for the SDGs provides a strong base for global efforts to support local initiatives and the UN is already doing a lot to spur local action in all parts of the world in an effort to save the planet. In 2019, world leaders assembled at the SDG Summit called for a Decade of Action for Sustainable Development and pledged to mobilize financing, enhance national implementation, and strengthen institutions to achieve the SDGs by 2030, leaving no one behind. The UN offers a wide range of online resources at its Sustainable Development Knowledge Platform (https://sdgs.un.org). The UN partnership portal related to goal 17 provides a global registry of multistakeholder networks that may serve as a source of inspiration for local voluntary action. Finally, the annual SDG reports help to keep track of global implementation efforts and prompt further action to meet the Goals.

Although the World Bank does not talk about sustainability as such, it is strongly affiliated with the 2030 Agenda and perceives the SDGs as being well aligned with its twin goals of ending extreme poverty and boosting shared prosperity. The World Bank aims to catalyze the SDGs and the rest of the 2030 Agenda through the exercise of leadership, global convening, and promotion of country-level uptake. The World Bank is working with client countries to deliver on the 2030 Agenda in three critical areas: (1) financing of development projects; (2) the provision of data on performance in relation to key goals, and (3) implementation of country-led and country-owned policies to attain the SDGs. Recently, a group of environmental economists at the World Bank began working on ways to measure sustainability as a part of the *Changing Wealth of Nations* project (World Bank, 2018). They were concerned that measuring the flow of

"income" through the growth in GDP provides no indication of the state of natural assets such as forests, water, and minerals, which are critical for generating sustainable economic growth. Hence, they explored whether it is possible to systematically track and measure "wealth" in terms of forests, water and minerals, just as we track and measure assets like buildings, machinery, roads etc. Political opposition to the project, mainly from the US, has apparently stalled the project, but there is hope that a new US Presidency will revive this agenda.

Although the International Monetary Fund (IMF), with its emphatic concern for maintaining a stable monetary system and global price stability, may seem to be distant from the SDGs, it engages with the SDGs when they affect economic stability and sustainable and inclusive growth. As such, the IMF aims to ensure financial stability and durable growth rates that are compatible with growing income equality. It helps to assess public spending needs and to create fiscal space for growth-enhancing and poverty-reducing investments in health, education, infrastructure, and agricultural productivity. It assists countries in making sure that energy prices reflect health and environmental costs and helps them with pricing carbon emissions and removing black energy subsidies (Annett & Lane, 2018).

The OECD is still focusing on GDP growth rather than the sustainability of the planet. However, in 2016, it launched an action plan to support the realization of the UN SDGs by helping countries to assess their global position in relation to the SDGs, providing data and expertise and helping to improve policies and institutions so that they can deliver the SDGs (OECD, 2016). In 2019, this plan was followed by another report on how countries measure their progress on the SDGs, particularly with a focus on economic aspects such as entrepreneurship, finance, trade, labor markets etc. (OECD, 2019). The OECD is also supporting the formation of partnerships that can create synergies among private and public, domestic and international, and donor and developing country resources. While the focus on environmental sustainability remains limited, there are two areas where OECD initiatives particularly support the 2030 Agenda. The first area is the attempt to reduce global inequality and the second is the fight against illicit financial flows, including money laundering, tax evasion, and international bribery that all have a devastating impact on the developing countries.

Private investment corporations make an important contribution to delivering the SDGs through so-called impact investments that are actively seeking investments that can create a significant, positive impact in the area of environmental sustainability and social justice. Some of the big impact investors are Vital Capital Fund, Triodos Investment Management, the Reinvestment Fund, BlueOrchard Finance, and the Community Reinvestment Fund. Working in tandem with government and international organizations providing investment guarantees, impact investments may play a small but significant role in closing the SDG funding gap. Large philanthropists such as the Bill and Melinda Gates Foundation also contribute to closing this gap, especially in the field of health and education. Philanthropy not only helps to fund important projects around the globe, but play a crucial role in promoting risk-taking in the search for innovative solutions. Philanthropy is not merely a North-South affair since the global south is creating its own philanthropy organizations such as the African Philanthropy

Forum that aims to promote a giving culture and supports projects in countries throughout the continent. Building a supportive environment for philanthropy in all parts of the world may further enhance its role and impact.

Global microfunding is another way to support the global attainment of the SDGs. For example, the US-based nonprofit Kiva.org runs an online crowd-funding platform that connects microborrowers and -lenders. Borrowers advertise their need for funding and a supportive lender provides the loan that is paid back in 97% of the cases, enabling the lender to offer new loans. Microfunding is expanding at the global scale and plays a key role in India, Indonesia, and other Asian countries. It provides support to millions of people and the number of people that are positively affected is even bigger.

Local cocreation of SDGs is not only affected by distant global and international actors. National governments play an even bigger role in providing a supportive environment that puts social, economic, and environmental sustainability on the agenda and stimulates cross-boundary collaboration that involves local citizens and stakeholders. Drawing on the argument presented in the previous sections, we recommend national governments to do three things to stimulate cocreation for sustainability.

First, we recommend that national governments revise their economic models, objectives, and policy-making routines so that they are not merely focusing on advancing productive efficiency and GPD growth, but also take into account the need for social redistribution of wealth and life opportunities and the planetary limits to economic activities. While the instruments for enhancing social redistributions are well-known, governments need to find new ways of building sustainable production and consumption systems based on a low carbon circular economy.

Second, we recommend that national governments provide political and financial support for local changemakers and encourage them to form networks and partnerships that can spur collaboration and innovation. Supporting local cocreation may involve the formation of new platforms and arenas that spur local action, but it may also involve an enhanced responsiveness to local ideas and strategies for scaling best practices. Governments can go a long way to enhance change and support sustainable production, consumption, and living without jeopardizing political stability.

Finally, we recommend that national governments pay attention to the demands of their increasingly competent, critical, and assertive citizens to influence the conditions that shape their daily living and their quality of life. Mass participation in cocreating sustainable solutions to pressing social and environmental problems will further empower citizens and supplement existing forms of representative democracy with new forms of participatory and deliberative democracy at the local level, which may not only mobilize valuable resources, but also enhance the democratic legitimacy of government.

On a final note, we believe that the COVID-19 pandemic has contributed to eliminating the distance between global, national, and local action. The pandemic has clearly demonstrated that humankind is facing global problems that assert themselves with equal force and magnitude in Maputo, Malaga, and Malibu. At

the same time, the pandemic has made it clear that national and local action matter and may either reduce or accelerate the spread of the virus and the mortality rate. As such, the COVID-19 outbreak has revealed that we are all part of the same community of destiny and that the local, national, and global levels are closely related. Remembering this important lesson may help engage actors at all levels in joint action to deliver the SDGs.

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